PB87-111894

Water Resources Data for North Carolina, Water Year 1985

(U.S.) Geological Survey, Raleigh, NC

16 Apr 86

U.S. Department of Commerce
National Technical Information Service
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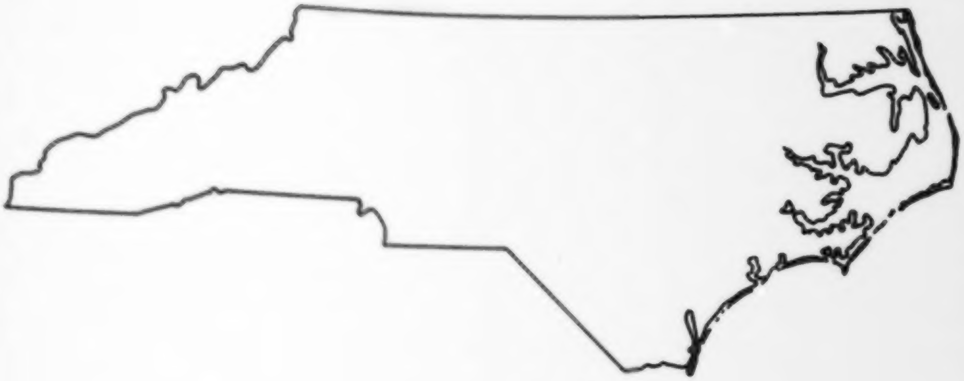
PB87-111894

U.S. DEPARTMENT OF THE INTERIOR
March 3 1849

Water Resources Data
Water Year 1985
North Carolina



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NC-85-1
Prepared in cooperation with the North Carolina Department of Natural Resources and Community Development, and with other State, municipal, and Federal agencies

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SPRINGFIELD, VA. 22161

CALENDAR FOR WATER YEAR 1985

1984

OCTOBER

S	M	T	W	T	F	S
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1985

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SEPTEMBER

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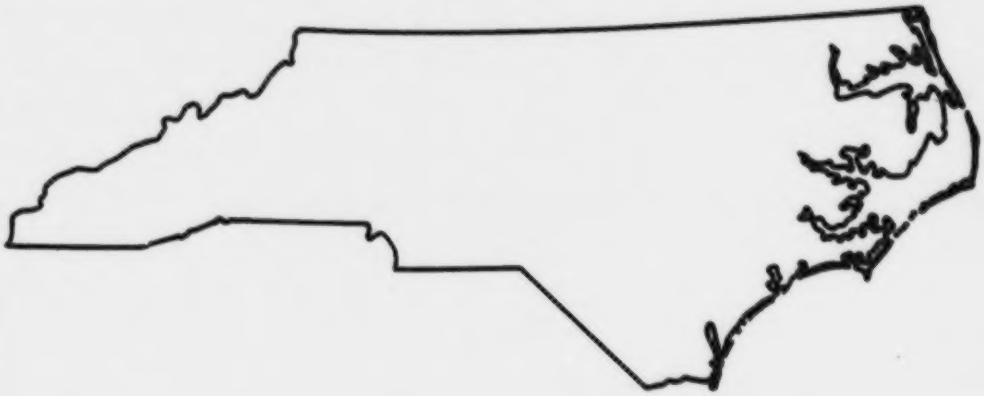
29	30					

DEPARTMENT OF THE INTERIOR
March 3, 1849

Water Resources Data North Carolina

Water Year 1985

by C.L. Hill, J.F. Rinehardt and T.E. Dillard



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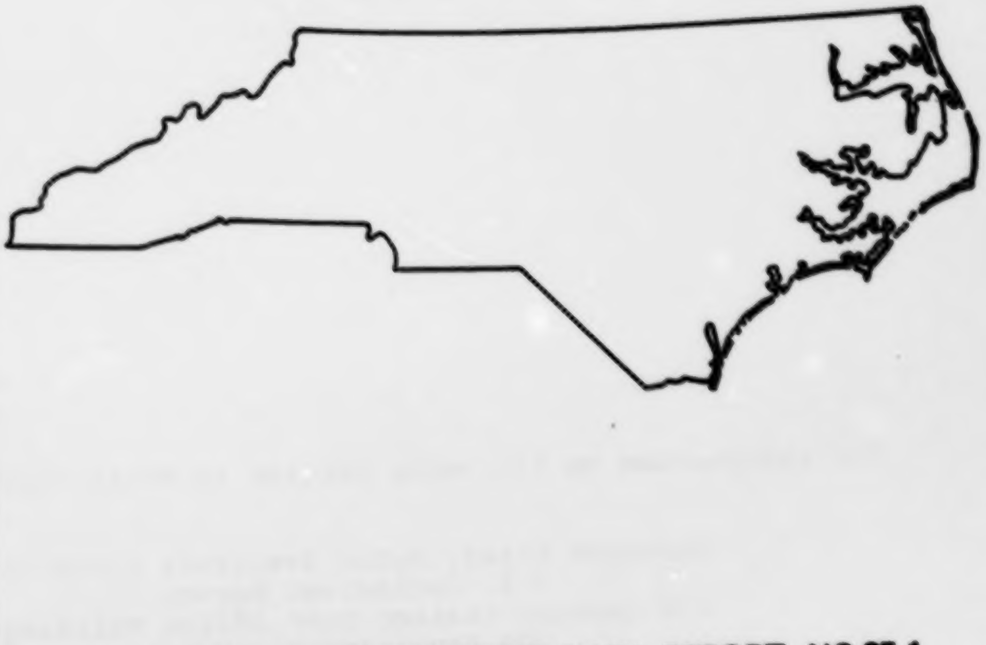

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UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD P. HODEL, SECRETARY

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Raleigh, North Carolina 27602

1985

PREFACE

This volume of the annual hydrologic data report of North Carolina is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for North Carolina are contained in the volume.

This report is the culmination of a concerted effort by dedicated personnel of the U. S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of North Carolina and with other agencies under the general supervision of James F. Turner, District Chief, and James L. Cook, Regional Hydrologist, Southeastern Region.

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-86/223	2.	3. Recipient's Accession No. PB87 111894/AS

4. Title and Subtitle

Water Resources Data, North Carolina, Water Year 1985

5. Report Date

April 16, 1986

6.

7. Author(s)

C. L. Hill, J. F. Rinehardt, and T. E. Dillard

8. Performing Organization Rept. No.

USGS-WRD-NC-85-1

9. Performing Organization Name and Address

U. S. Geological Survey, Water Resources Division
436 Century Station Post Office Building
300 Fayetteville Street
Raleigh, North Carolina 27602

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.

(C)

(G)

12. Sponsoring Organization Name and Address

U. S. Geological Survey, Water Resources Division
436 Century Station Post OFfice Building
300 Fayetteville Street
Raleigh, North Carolina 27602

13. Type of Report & Period Covered

Annual-Oct. 1, 1984-
Sept. 30, 1985

14.

15. Supplementary Notes

Prepared in cooperation with the State of North Carolina and with other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1985 water year for North Carolina consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and ground-water levels. This report contains discharge records for 154 gaging stations and stage and contents for 25 lakes and reservoirs; water quality for 137 gaging stations and 12 miscellaneous sites; and water levels for 68 observation wells. Additional water data were collected at various sites not involved in the systematic data-collection program, and are published as miscellaneous measurements in this report. The collection of water-resources data in North Carolina is a part of the National Water-Data System operated by the U. S. Geological Survey in cooperation with State, municipal, and Federal agencies.

17. Document Analysis a. Descriptors

*North Carolina, *Hydrologic data, *Surface water, *Ground water, *Water Quality, Flow rate, Gaging Stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

IV

18. Availability Statement: No restrictions on distributions. This report may be purchased from: National Technical Information Service, Springfield, VA 22161	19. Security Class (This Report) Unclassified	21. No. of Pages 569
	20. Security Class (This Page) Unclassified	22. Price

(See ANSI-Z39.18)

See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

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WATER RESOURCES DATA FOR NORTH CAROLINA, 1985

INTRODUCTION

Water resources data for the 1985 water year for North Carolina consist of records of stage discharge, and water quality of streams; stage and contents of lakes and reservoirs; and ground-water levels. This report contains discharge records for 154 gaging stations and stage and contents for 25 lakes and reservoirs; water quality for 137 gaging stations and 12 miscellaneous sites; and water levels for 68 observation wells. Additional water data were collected at various sites not involved in the systematic data-collection program, and are published as miscellaneous measurements in this report. The collection of water-resources data in North Carolina is a part of the National Water-Data System operated by the U.S. Geological Survey in cooperation with State, municipal, and Federal agencies.

Records of discharge of streams, and contents and stage of lakes or reservoirs, were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities and universities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Virginia 22304.

Since the 1961 water year, streamflow data, and since the 1964 water year, water-quality data have been released by the Geological Survey in annual reports on a State-boundary basis. These reports provided rapid release of water data in each state shortly after the end of the water year. Through 1970 the data were also released in the water-supply paper series mentioned above.

Streamflow and water-quality data beginning with the 1971 water year, and the ground-water data beginning with the 1975 water year are published only in reports on a State-boundary basis. Beginning with the 1975 water year, these Survey reports carry an identification number consisting of the two-letter state abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U. S. Geological Survey Water-Data Report NC-85-1". Water-data reports are for sale by the National Technical Information Service, U. S. Department of Commerce, Springfield, Virginia 22161.

Additional information, including current prices for ordering specific reports, may be obtained from the district chief at the address given on the back of the title page or by telephone (919) 856-4784.

COOPERATION

Cooperative agreements between the U. S. Geological Survey and organizations of the State of North Carolina for the systematic collection of streamflow records began in 1895 and continued through 1909. After a lapse of eight years, the State of North Carolina resumed cooperation in October 1918. Organizations that assisted in collecting the data contained in this report through cooperative agreements with the Survey are:

State Department of Human Resources, Dr. Sarah T. Morrow, Secretary.
State Department of Natural Resources and Community Development,
    James A. Summers, Secretary, through the following:
    Division of Environmental Management,
    Robert T. Helms, director.
State Board of Transportation, Division of Highways
    Billy Rose, highway administrator.
City of Charlotte, Harvey B. Gantt, mayor.
City of Durham, Orville W. Powell, city manager.
City of Greensboro, William Carstarphen, city manager.
City of Raleigh, Charles A. Thomas, P.E., chief engineer.
City of Rocky Mount, William H. Batchelor, city manager.
Guilford Soil and Water Conservation District,
    Willard H. Kimrey, chairman.

The following Federal agencies assisted in the data collection program by furnishing funds or services:

Corps of Engineers, U. S. Army
Tennessee Valley Authority
Soil Conservation Service, U. S. Department
    of Agriculture
National Weather Service, NOAA, U. S.
    Department of Commerce
Environmental Protection Agency

The following organizations aided in collecting records:

Cities of Danville, Virginia; E. I. du Pont de Nemours and Co.; Carolina Power and Light Co.; Champion International Corp.; Duke Power Co.; Fiber Industries, Inc.; Olin Corp.; P. P. G. Industries; North Carolina Power Co.; and Yadkin, Inc.

SUMMARY OF WATER-RESOURCES CONDITIONS

Below average streamflow generally prevailed across North Carolina during the 1985 water year and annual mean flows were in the lowest 25 percent of record. Comparison of annual mean discharge for the 1985 water year to median discharge, 1951-80 water years, for selected representative stations is as follows: French Broad River at Asheville, 63 percent; South Yadkin River near Mocksville, 70 percent; Deep River near Moncure, 73 percent; and Contentnea Creek at Hookerton, 65 percent. Comparisons of monthly and annual mean discharges for the 1985 water year to the median of the monthly and annual mean discharges for the period 1951-80 are shown in figure 1.

Precipitation during the 1985 water year was below normal throughout most of the State with a large part of the deficit occurring during the months of March and April. The deficit for the water year, as reported by the National Oceanic and Atmospheric Administration, for Asheville, Charlotte, and Raleigh, was 18.06 inches, 3.37 inches, and 9.07 inches, respectively. Rainfall for March was the minimum of record at Charlotte, Greensboro, and Asheville (downtown). Rainfall for April and May was also minimal; the spring of 1985 (March, April, and May) was the driest of record. Spring rainfall at Asheville was 8.06 inches below normal. Rainfall reported for many areas of the Coastal Plain was less than 4 inches during the spring months which delayed planting of crops and caused general concern for possible water shortages. Rainfall amounts for the months of May and June were also minimal. Temperature was above normal during the spring, and numerous forest fires occurred in the western Piedmont and eastern Coastal Plain.

Streamflow was near average in the Coastal Plain and Piedmont provinces and below average in the Blue Ridge province at the beginning of the water year. Monthly mean flow ranged from approximately 60 to 85 percent of median monthly flow statewide from November through January. In February, streamflow was near or slightly above average statewide for the first time in four months. Record low rainfall for March, combined with above normal temperatures, caused streamflow to fall significantly below the median. Near record low flows for March occurred on the French Broad River at Asheville and South Yadkin River near Mocksville. April mean flow ranged from 35 to 55 percent of median monthly flow statewide.

Record minimum daily and monthly mean flows for June occurred at Contentnea Creek at Hookerton; but localized above normal rainfall caused minor flooding in a few areas, including Charlotte and Statesville. Streamflow remained significantly below average until July 23, when tropical storm Bob moved into the State; locally heavy thunderstorms produced as much as 6 inches of rainfall in a few areas. On August 17 and 18, rainfall from hurricane Danny caused 5- to 10-year floods in some areas of the Piedmont province. Monthly mean flows for August were above average statewide for the first time since February. Hurricane Gloria caused minor localized flooding on September 27 and 28 in the extreme eastern and northeastern counties.

Ground-water levels in unconfined aquifers fluctuated seasonally during the water year (fig. 2). Levels were generally above average in the Blue Ridge and Piedmont provinces through April and near average for the remainder of the year. Water levels in the Coastal Plain province were near average throughout most of the year but rose to well above average by the end of September.

Water levels in confined aquifers in some areas of the central and northern Coastal Plain province, affected by withdrawals for municipal and industrial use, declined to record lows. Record-low levels occurred in wells in Carteret, Chowan, Craven, Hertford, Lenoir, and Onslow Counties.

Ground-water withdrawals in the Coastal Plain province have resulted in declining water levels for a number of years. An example of this trend is illustrated in figure 3 by the hydrograph of water levels at the City of New Bern well field at Cove City for the period 1965-85.

The chemical quality of selected streams varied during the water year but was near the long-term seasonal average. Concentrations of major dissolved constituents, such as chloride, sodium, and calcium, were near long-term averages but were slightly greater than concentrations for 1984. Specific conductance, an indicator of the concentration of dissolved constituents, was measured at about 20 sites across the State. Specific conductance was above average at monitoring sites in the Piedmont and Coastal Plain provinces during the year, except for October and February when it was slightly below average. The variation of monthly and annual means of specific conductance at selected index sites in the Piedmont and Coastal Plain provinces during the water year, and for the reference period 1975-85, is shown in figure 4.

As in 1983 and 1984, concentrations of nitrite plus nitrate nitrogen occasionally exceeded 10 mg/L at sites on several tributary streams to B. Everett Jordan Lake and exceeded 10 mg/L several times on one tributary to Falls Lake. The high concentrations of manganese, reported in previous reports for tributaries to the Falls and B. Everett Jordan Lakes and for outflow from the lakes, were not observed during 1985.

Beginning in late 1983, an investigation was begun to study the effects of precipitation on stream chemistry in the Sandhills. Rainfall during the year continued to be acid, normally having pH values of about 4.5 units, with a minimum value of 3.9 units. A pH of 3.8 units was measured on July 25 in Jordan Creek near Silver Hill. Typical pH values for streams originating in the Sandhills generally range from about 4 to 5 units.

Accelerated erosion of soils from prime farmlands continues to be a problem, especially in the rolling Piedmont and Blue Ridge provinces. An investigation of the effects of land-management practices on soil erosion, begun in 1984 in northern Guilford County, shows that levels of suspended sediment in runoff from land having poor management practices can be 4 to 5 times greater than those from well-managed lands. Concentrations of suspended sediment exceeded 57,000 mg/L in storm runoff from one 6-acre tract, which was not contoured and did not have grassed waterways. This concentration was more than 100 times greater than concentrations normally expected in rural Piedmont streams (during moderate storm runoff) and almost 1000 times greater than concentrations occurring in totally forested basins in the Piedmont.

Daily concentrations of suspended sediment for Yadkin River at Yadkin College, a long-term sediment station, are used to define trends. The sediment-transport load for the water year was less than the average annual load for the period 1951-85 (fig. 5).

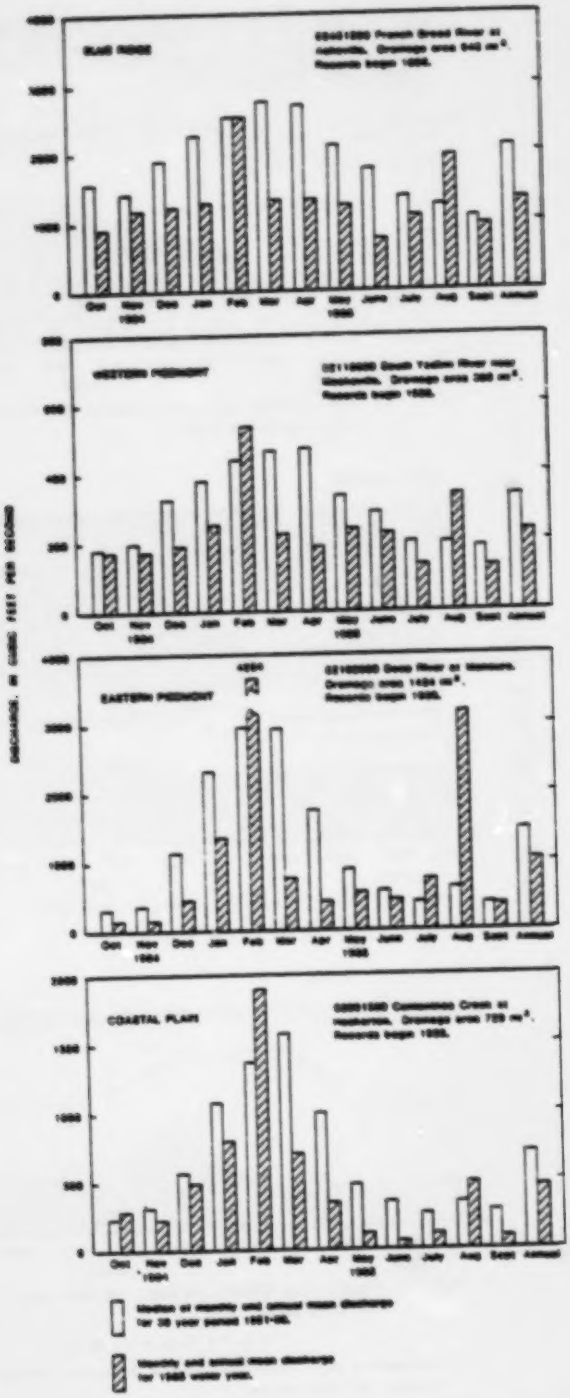
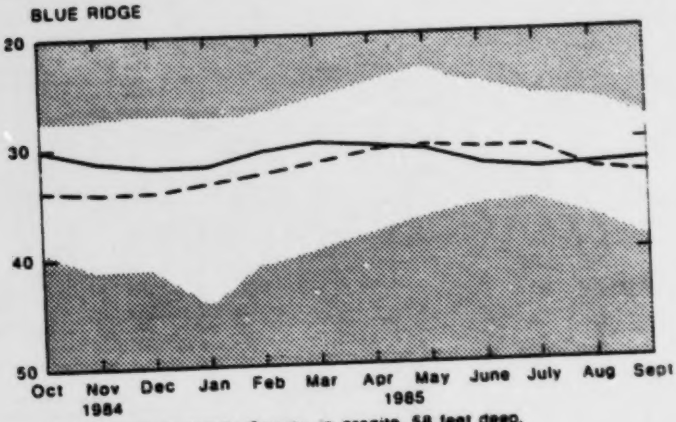


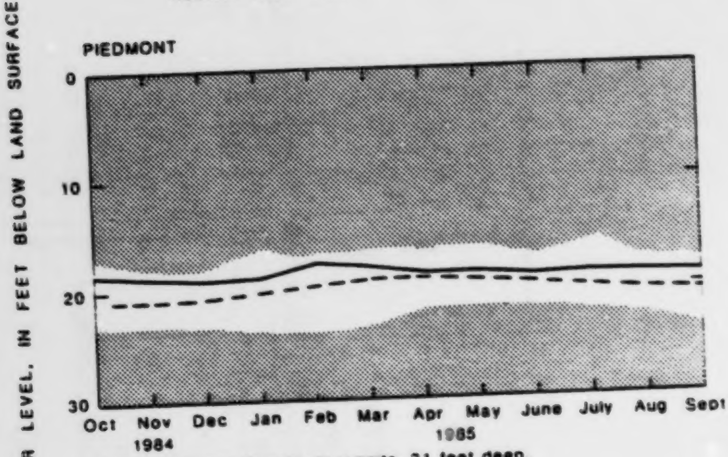
Figure 1.--Comparison of discharge at four long-term index stations during the 1985 water year with median discharge for the period 1951-80.

BLUE RIDGE



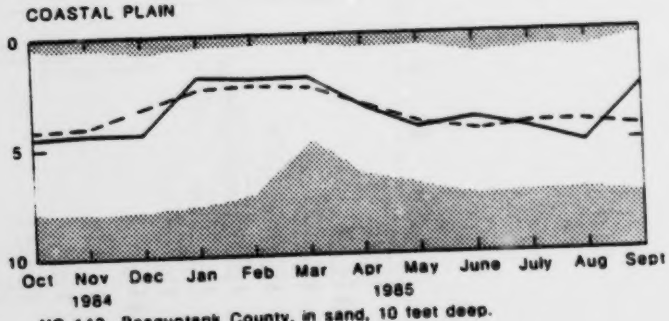
NC-144 Transylvania County, in granite, 58 feet deep.
Records begin 1932.

PIEDMONT



NC-142 Davie County, in granite, 31 feet deep.
Records begin 1931.

COASTAL PLAIN



NC-143 Pasquotank County, in sand, 10 feet deep.
Records begin 1936.

EXPLANATION

Unshaded area indicates range between highest and lowest record for the month.

Dashed line indicates average of monthly levels in previous years.

Solid line indicates level for 1985 water year.

Figure 2.--Comparison of water levels at three long-term wells during the 1985 water year with monthend high, low, and average levels in previous years.

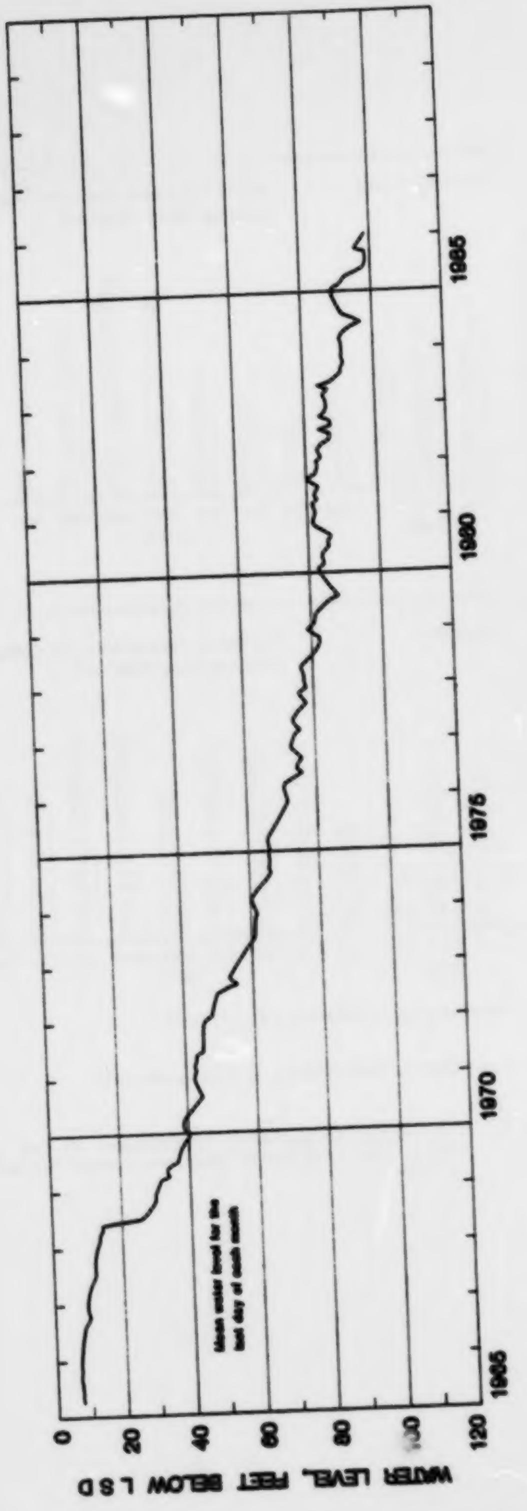


Figure 3.—Hydrograph for observation well NC-44 at the City of New Bern well field at Cove City, NC.

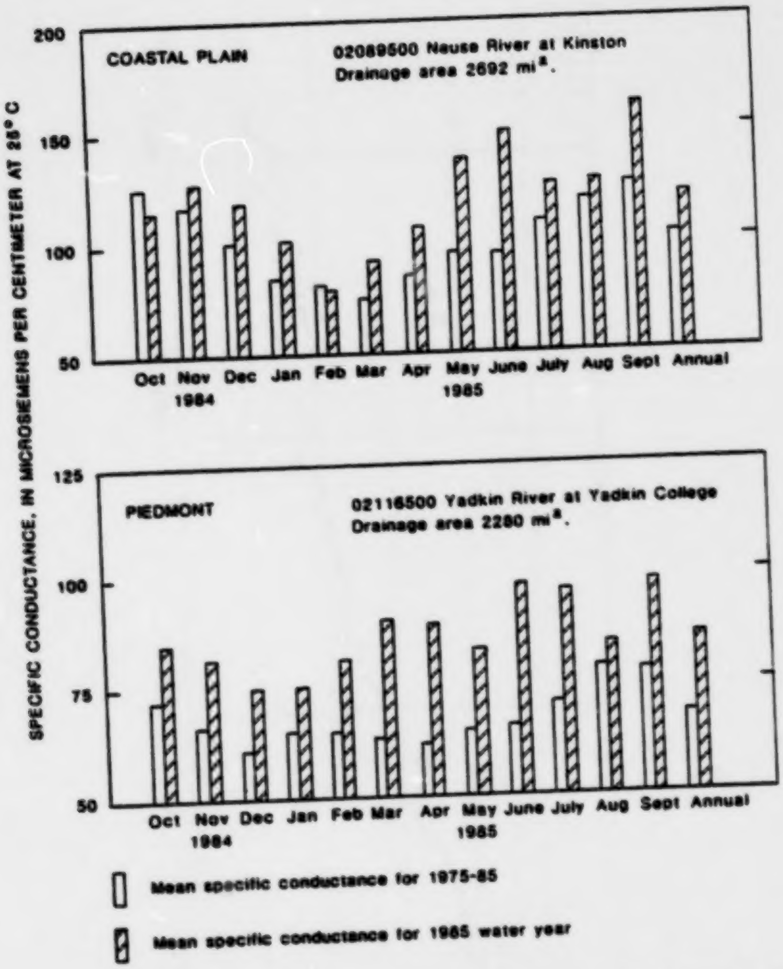


Figure 4.--Comparison of specific conductance at two long-term stations during the 1985 water year with mean values for the period 1975-85.

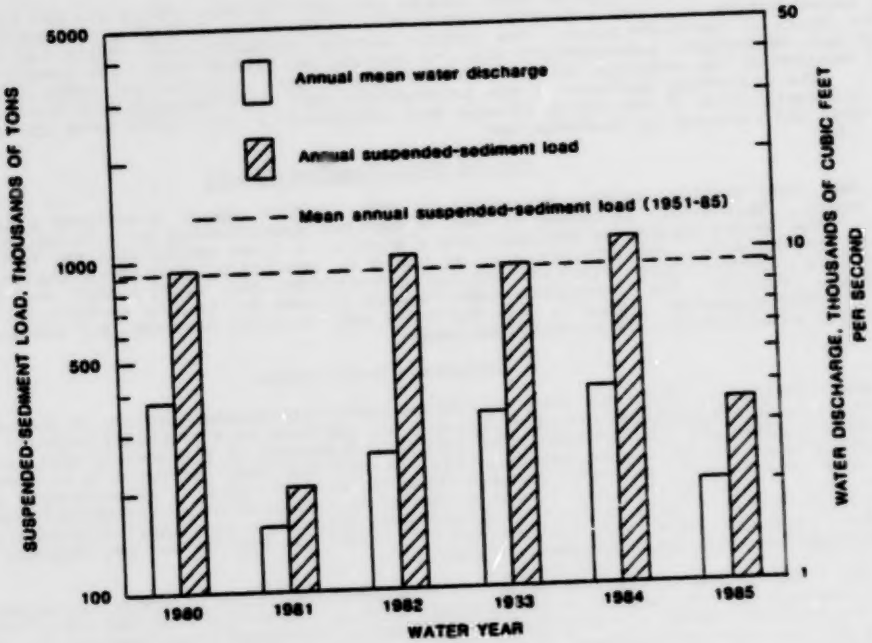


Figure 5.--Comparison of total suspended-sediment loads and mean water discharges at Yadkin River at Yadkin College, NC, 1980-85.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U. S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1985 water year that began October 1, 1984, and ended September 30, 1985. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 7, 8, 9, & 10. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in North Carolina, for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 02053200, which appears just to the left of the station name, includes the two-digit Part number "02" plus the six-digit downstream-order number "053200." The Part number designates the major river basin; for example, part "02" is the South Atlantic Slope Basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

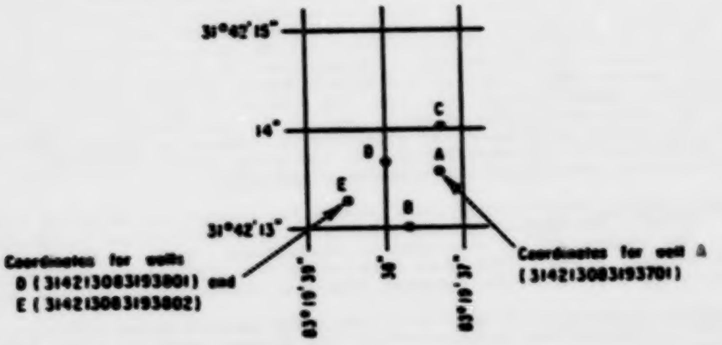


Figure 6.—System for numbering wells (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed ("IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the North Carolina District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Discharge Collected by Agencies Other Than the Geological Survey

Records of stream stage not published by the U.S. Geological Survey were collected in North Carolina during the 1981 water year by the National Weather Service, NOAA, U.S. Department of Commerce and other Federal agencies. The National Water Data Exchange (NAWDEX), Water Resources Division, U.S. Geological Survey, National Center, Reston, Virginia 22092, maintains an index of such sites. Information on records available at specific sites can be obtained upon request.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 9 & 10.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on page   of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey District office whose address is given on the back of the title page of this report.

NOTICE: Values of dissolved and total selenium exceeding 5 ug/L in samples collected prior to 1975 are probably incorrect and should only be used with caution. Values of dissolved selenium greater than 1 ug/L collected prior to 1975 should also be considered questionable, although a fair percentage of them may, in fact, be correct.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, samples for turbidity, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, Colorado, or Doraville, Georgia, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
<	Actual value is known to be greater than the value shown
>	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-water Levels

Data Collection and Computation

The ground-water level data from a basic network of observation wells and special project wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figures 9 & 10.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number.

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. Water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum (NGVD) or land-surface datum (lsd). National Geodetic Vertical Datum is the plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. Accordingly, all measurements are reported to a hundredth of a foot.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well. Names of aquifers in the Coastal Plain province are those used in the recently completed North Carolina Coastal Plain aquifer study which was part of the Geological Survey's North Atlantic Coastal Plain Regional Aquifer System Analysis (RASA). Aquifers in the Piedmont and Blue Ridge provinces are listed as the rock type of the crystallize igneous or metamorphic rock or the weathered material derived from the rock that the well taps.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and (or) screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum (NGVD) or land-surface datum (lsd). For some wells equipped with recorders, only abbreviated tables are published; generally, only water-level means are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed on a following page. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by county, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief, Hydrologist, U. S. Geological Survey
437 National Center, Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting English units to International System of Units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 0.5°C on KF Streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artifical structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/s, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved is that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage", although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCo_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area of habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U. S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U. S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter or particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distribution given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of micro-organisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{-10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly-swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrients. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water currents, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are steepness of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same stream with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in a dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) *dissolved* and (2) *total recoverable* concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water- suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) *dissolved* and (2) *total* concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom..................Animal
Phylum..............Arthropoda
Class..................Insecta
Order...............Ephemeroptera
Family..............Ephemeridae
Genus...............*Hexagenia*
Species.....*Hexagenia limbata*

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total load (tons) is the total quantity of any individual constituent, as measured mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge times the mg/L of the constituent times the factor 0.027 times the number of days.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion proce dures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Water year in the Geological Survey reports is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ended September 30, 1978, is called the "1978 water year."

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

DISCONTINUED GAGING STATIONS

The following continuous-record streamflow stations in North Carolina have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record shown for each station.

Station number	Station name	Drainage area (mi²)	Period of record
	Chowan River Basin		
02053400	Ahoskie Creek near Rich Square, NC	3.70	1964-73
02053450	Ahoskie Creek at Mintons Store, NC	24.0	1964-73
02053510	Ahoskie Creek Tributary at Poortown, NC	2.60	1963-73
02068000	Dan River near Asbury, NC	71.4	1924-26
02069000	Dan River at Pine Hall, NC	480	1923-26
02070500	Mayo River near Price, NC	260	1929-71
02071500	Dan River at Leaksville, NC	1,150	1929-49
02074218	Dan River near Mayfield, NC	1,770	1976-84
02075160	Moon Creek near Yanceyville, NC	29.9	1961-74
02077230	South Hyco Creek near Hesters Store, NC	29.9	1964-67
02077240	Double Creek near Roseville, NC	7.47	1964-75 1977-82
02077250	South Hyco Creek near Roseville, NC	56.5	1966-78
02077300	Hyco River at McGhees Mill, NC	191	1964-73
02077660	Mayo Creek near Woodsdale, NC	52.7	1975-77
02081000	Roanoke River near Scotland Neck, NC	8,671	1940-56 1974-76
	Neuse River Basin		
02081800	Cedar Creek near Louisburg, NC	47.8	1956-75
02082000	Tar River near Nashville, NC	701	1928-71
02082500	Sapony Creek near Nashville, NC	64.0	1950-70
02084070	Green Mill Run at Arlington Blvd at Greenville, NC	9.10	1980-83
02084317	Black Swamp near Batts Crossroads, NC	1.02	1982
02084500	Herring Run near Washington, NC	9.59	1950-80
02084556	North Lake Canal above Pungo Lake near Wenona, NC	0.29	1976-80
02084558	Albemarle Canal near Swindell, NC	68.0	1977-81
02084903	Sevenmile Creek Trib at SR 1120 near Buckhorn, NC	1.34	1981-82
02084904	Sevenmile Creek Trib at I-85 near Miles, NC	.004	1981-82
02084905	Sevenmile Creek Trib at SR 1144 near Miles, NC	1.57	1981-82
02084908	Sevenmile Creek Trib at I-85 near Efland, NC	0.29	1981-82
02084909	Sevenmile Creek near Efland, NC	14.1	1981-82
02085000	Eno River at Hillsboro, NC	66.5	1927-71
02086000	Dial Creek near Bahama, NC	4.71	1925-71
02087000	Neuse River near Northside, NC	535	1927-80
02088315	Beaverdam Creek near Grantham, NC	5.01	1978-82

Station number	Station name	Drainage area (mi²)	Period of record
		2.17	1980-84
02088682	Big Ditch at Bethe St at Goldsboro, NC	3.80	1978-81
02089216	Daileys Creek near Liddell, NC	4.27	1978-82
02089222	Bear Creek near Parkstown, NC	236	1930-54
02090500	Contentnea Creek near Wilson, NC	9.80	1971-77
02091960	Creeping Swamp near Calico, NC	24.0	1971-76
02092020	Palmetto Swamp near Vanceboro, NC		
	Cape Fear River Basin		
		74.5	1949-73
02093000	Haw River near Gum Branch, NC	168	1928-71
02093500	Haw River near Benaja, NC	15.9	1925-31
02094000	Horsepen Creek at Battle Ground, NC	33.6	1928-58
02095000	S Buffalo Creek near Greensboro, NC	44.2	1952-59
02096000	Stony Creek near Burlington, NC	116	1957-80
02096700	Big Alamance Creek near Elon College, NC	0.64	1979-81
02096842	Cane Creek 0.1 mile upstream SR 1126 near Buckhorn, NC	33.7	1959-73
02096850	Cane Creek near Teer, NC	1,310	1928-73
02097000	Haw River near Pittsboro, NC	16.7	1968-73
02097243	Third Fork Creek at Durham, NC	30.1	1923-32
02097500	Morgan Creek near Chapel Hill, NC	285	1949-73
02098000	New Hope River near Pittsboro, NC	32.1	1923-26
02098500	West Fork Deep River near High Point, NC		1928-58
		16.7	1934-41
02100000	Muddy Creek near Archdale, NC	134	1939-71
02101000	Bear Creek at Robbins, NC	15.5	1950-81
02101800	Tick Creek near Mount Vernon Springs, NC	348	1938-50
02103000	Little River at Manchester, NC	460	1928-71
02103500	Little River at Linden, NC	4,395	1889-1903
02104000	Cape Fear River at Fayetteville, NC		1928-40
		2.62	1976-80
02104387	Buckhead Creek near Owens, NC	284	1929-31
02104500	Rockfish Creek near Hope Mills, NC	1.81	1979-81
02105524	Ellis Creek Trib at SR 1325 near White Oak, NC	21.6	1956-73
02105900	Hood Creek near Leland, NC	48.3	1976-77
02106681	Black River near Dunn, NC	103	1950-71
02107500	Colly Creek near Kelly, NC	47.5	1958-75
02107600	Northeast Cape Fear River near Seven Springs, NC	69.3	1955-81
02108500	Rockfish Creek near Wallace, NC		
	Pee Dee River Basin		
		109	1920-32
02112500	Fisher River near Dobson, NC	21.7	1940-71
02113500	Forbush Creek near Yadkinville, NC	82.8	1964-70
02115750	Muddy Creek near Lewisville, NC	11.8	1964-70
02115800	Silas Creek near Clemmons, NC	0.05	1979-82
02115841	Tar Br Trib at First St at Winston-Salem, NC	51.3	1964-70
02115850	Salem Creek at Winston-Salem, NC	0.50	1979-82
02115854	Salem Creek Trib at Hawthorne Rd, Winston-Salem, NC	65.6	1971-82
02115856	Salem Creek near Atwood, NC	186	1964-79
02115860	Muddy Creek near Muddy Creek, NC	42.9	1964-79
02115900	South Fork Muddy Creek near Clemmons, NC	1.05	1968-83
02117030	Bumpy Creek near Fork, NC	102	1940-71
02117500	Rocky Creek at Turnersburg, NC	569	1928-65
02119000	South Yadkin River at Cooleemee, NC	4.84	1956-69
02119400	Third Creek near Stony Point, NC	87.4	1940-71
02120500	Third Creek at Cleveland, NC	3,470	1895-1927
02121000	Yadkin River near Salisbury, NC	5.16	1978-81
02121493	Leonard Creek near Bethesda, NC	174	1940-57
02121500	Abbotts Creek at Lexington, NC	4,000	1919-27
02122500	Yadkin River at High Rock, NC	11.3	1934-41
02123000	Uwharrie River near Trinity, NC	347	1930-71
02123500	Uwharrie River near Eldorado, NC	3.44	1981-83
02123567	Dutchmans Creek near Uwharrie, NC	170	1940-44
02125500	Richardson Creek near Marshville, NC	8.75	1978-82
02125557	Gourdvine Creek at SR 1715 near Olive Branch, NC	3.98	1969-79
02125696	Lane Creek at SR 2115 near Trinity, NC	5.83	1978-82
02125699	Wicker Branch at SR 1940 near Trinity, NC	13.5	1935-41
02126500	Little Brown Creek near Polkton, NC	110	1937-71
02127000	Brown Creek near Polkton, NC	6,330	1938-42
02127500	Pee Dee River near Ansonville, NC	9.43	1935-41
02129500	N Fork Jones Creek near Wadesboro, NC		
	Santee River Basin		
		20.7	1960-75
02137000	Mill Creek at Old Fort, NC	172	1941-81
02138000	Catawba River near Marion, NC	7.86	1966-70
02139200	Bailey Fork near Morganton, NC	8.94	1966-74
02139650	East Prong near Morganton, NC	31.8	1966-78
02141150	Lower Creek at Mulberry St at Lenoir, NC	1,535	1896-99
02142500	Catawba River at Catawba, NC		1935-62
		42.4	1957-62
02142600	Mountain Creek near Terrell, NC	0.62	1966-70
02142950	Paw C Tri No 2 at Allenbrook Drive, Charlotte, NC	18.5	1962-73
02146450	Briar Creek at Sharon Road, Charlotte, NC	41.0	1924-78
02146500	Little Sugar Creek near Charlotte, NC	97.0	1927-58
02148500	Broad River near Chimney Rock, NC	104	1972-75
02149702	Green River near Saluda, NC	174	1940-54
02150000	Green River near Mill Spring, NC	67.0	1925-28
02152000	Sandy Run Creek near Boiling Springs, NC	200	1940-71
02152500	First Broad River near Lawndale, NC		

Station number	Station name	Drainage area (mi²)	Period of record
	Savannah River Basin		
02184240	Horsepasture River near Sapphire, NC	21.0	1963-69
	Kanawha River Basin		
03161500	South Fork New River near Crumpler, NC	325	1908-16
03162500	North Fork New River at Crumpler, NC	277	1908-16 1928-58
03439500	French Broad at Calvert, NC	103	1924-55
03440000	Catheys Creek near Brevard, NC	11.7	1944-55
03440500	Davidson River near Davidson River, NC	31.0	1904-09
03441500	Little River near Penrose, NC	41.4	1942-55
03442000	Crab Creek near Penrose, NC	10.9	1942-55
03444000	Boylston Creek near Horseshoe, NC	14.8	1942-55
03444500	South Fork Mills River at the Pink Beds, NC	9.99	1926-49 1965-73
03445000	South Fork Mills River near Sitton, NC	40.0	1904-09 1925-26
03445500	North Fork Mills River at Pinkbed, NC	23.1	1904-09
03446500	Clear Creek near Hendersonville, NC	42.2	1945-55
03447000	Mud Creek at Naples, NC	109	1930-55
03447500	Cane Creek at Fletcher, NC	63.1	1942-58
03448500	Hominy Creek at Candler, NC	79.8	1942-77
03448960	N Fk Swannanoa River bl Burnett Res nr Black Mtn, NC	22.1	1976-77
03449000	North Fork Swannanoa River near Black Mountain, NC	23.8	1926-58
03449500	Swannanoa River at Swannanoa, NC	58.8	1907-09 1926-31
03450000	Beetree Creek near Swannanoa, NC	5.46	1926-75 1979-81
03452000	Sandymush Creek near Alexander, NC	79.5	1942-55
03452001	Sandymush Creek 1.1 mile above mouth near Alexander, NC	79.5	1975-77
03453000	Ivy River near Marshall, NC	158	1934-73
03454000	Big Laurel Creek near Stackhouse, NC	126	1934-71
03454500	French Broad River at Hot Springs, NC	1,567	1934-49
03456000	West Fork Pigeon Rv bl Lake Logan nr Waynesville, NC	55.3	1954-80
03457500	Allen Creek near Hazelwood, NC	14.4	1949-72
03458500	Pigeon River near Crabtree, NC	243	1920-29
03459000	Jonathan Creek near Cove Creek, NC	65.3	1930-72
03460500	Pigeon River near Mount Sterling, NC	460	1924-30
03462000	North Toe River at Altapass, NC	104	1938-57
03462500	North Toe River above Spruce Pine, NC	111	1934-38
03463500	South Toe River at Newdale, NC	60.8	1934-52
03464000	Cane River near Sioux, NC	157	1934-71
03464500	Nolichucky River at Poplar, NC	608	1925-55
03480500	Elk River near Banner Elk, NC	17.8	1934-40
03481000	Elk River near Elk Park, NC	42.0	1934-55
03500500	Cullasaja River at Highlands, NC	14.9	1931-71
03501000	Cullasaja River at Cullasaja, NC	86.5	1907-09 1921-71
03501500	Little Tennessee River at Franklin, NC	295	1909-10 1921-25
03502000	Little Tennessee River at Iotla, NC	323	1929-45
03502500	Little Tennessee River at Etna, NC	374	1926-29
03503500	Little Tennessee River at Almond, NC	451	1912-17
03505500	Nantahala River at Nantahala, NC	144	1942-81
03506500	Nantahala River at Almond, NC	174	1912-17 1920-43
03507000	Little Tennessee River at Judson, NC	664	1912-44
03508000	Tuckasegee River at Tuckasegee, NC	143	1934-76
03508136	Caney Fork near Cowarts, NC	32.0	1975-76
03509000	Scott Creek above Sylva, NC	50.7	1941-75
03509500	Scott Creek at Sylva, NC	55.0	1928-41
03510500	Tuckasegee River at Dillsboro, NC	347	1933-81
03511000	Oconaluftee River at Cherokee, NC	131	1921-49
03513500	Noland Creek near Bryson City, NC	13.8	1935-71
03514000	Hazel Creek at Proctor, NC	44.4	1942-52
03515000	Little Tennessee River at Fontana Dam, NC	1,571	1938-55
03016000	Snowbird Creek near Robbinsville, NC	42.0	1942-52
03517000	Cheoah River at Johnson, NC	177	1912-18 1920-26
03517500	Cheoah River at Tapoco, NC	215	1924-27
03546000	Shooting Creek near Hayesville, NC	37.6	1922-24 1942-45 1946-55
03547000	Hiwassee River below Chatuge Dam near Hayesville, NC	190	1942-74
03548000	Hiwassee River below Hayesville, NC	252	1934-45
03554000	Nottely River near Ranger, NC	272	1901-05 1914-17 1919-29 1932-45
03555000	Hiwassee River at Hiwassee Dam, NC	968	1934-43

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

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3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 Pages.

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3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan ane W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels*. by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

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3-B3. *Type curves for selected problems of flow to wells in confined aquifers*. by J. E. Reed: USGS-TWRI Book 3, Chapter B3. 1980. 106 pages.

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3-C2. *Field methods for measurement of fluvial sediment* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

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4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

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5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

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5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

5-C1. *Laboratory theory and methods for sediment analysis* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

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7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels* by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

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8-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

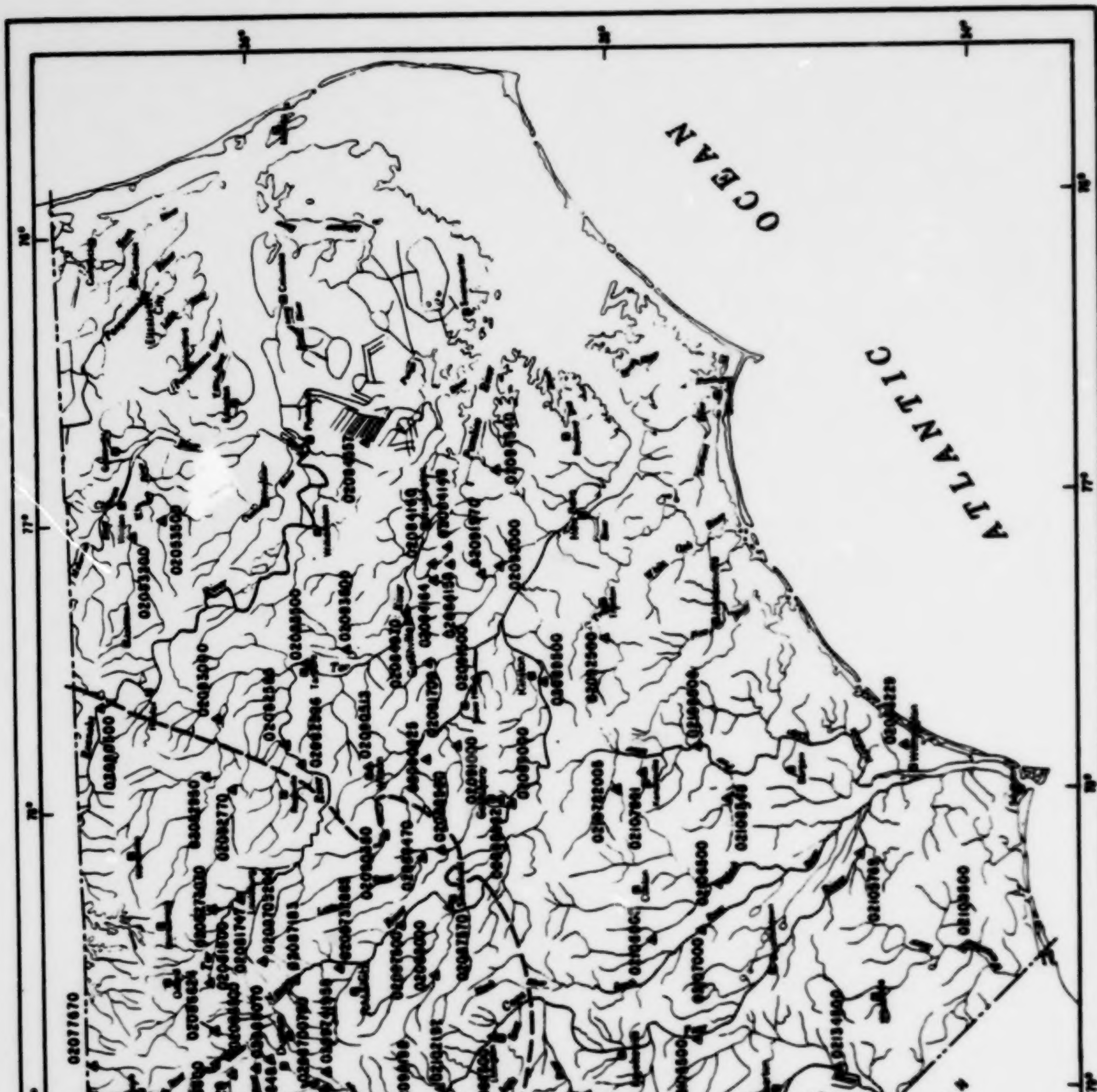
ATLANTIC
OCEAN
COASTAL PLAIN

Figure 7.--Map of eastern part of North Carolina showing location of gaging stations.

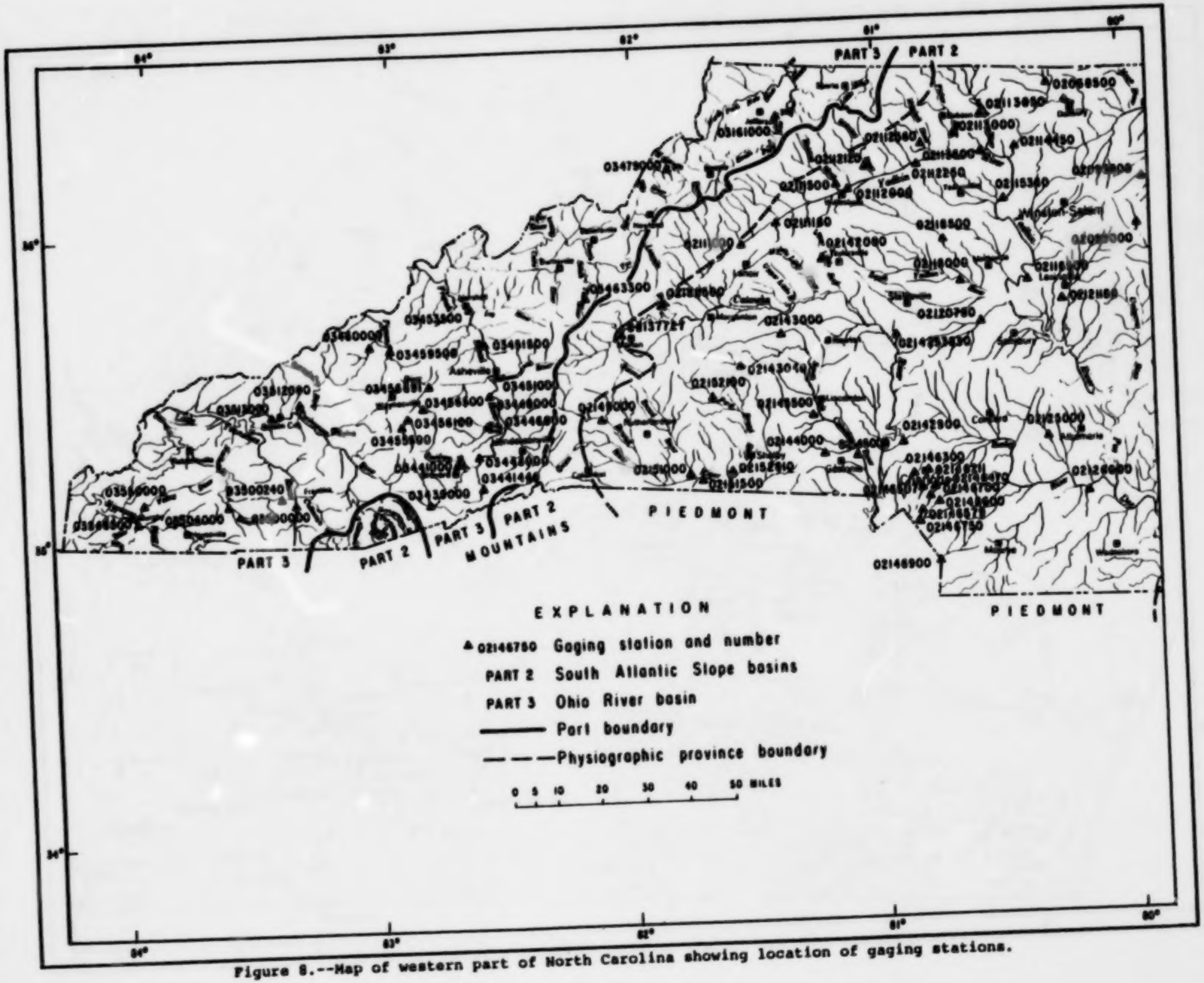
84°
83°
82°
81°
80°
36°
35°
34°
PART 3
PART 2
PIEDMONT
MOUNTAINS
EXPLANATION
▲ 02146750 Gaging station and number
PART 2 South Atlantic Slope basins
PART 3 Ohio River basin
Part boundary
Physiographic province boundary
0 5 10 20 30 40 50 MILES
02068500
02113850
02111000
02114450
02112360
03161000
03479000
02111500
02112000
02112250
02115360
02111180
02111000
02118500
02118000
02142000
03463300
02138500
02137727
02143000
02120780
03460000
03453500
03451500
03459500
02143040
02152100
03512000
03513000
03456991
03456500
03451000
03448000
03446000
02145000
02149000
03456100
03455500
02142900
02125000
02144000
02146000
02146300
03441000
03439000
03443000
03441440
02151000
02152500
02146900
02126000
03550000
03300240
03504000
02146750
Asheville
Winston-Salem
Yadkin

Figure 8.--Map of western part of North Carolina showing location of gaging stations.

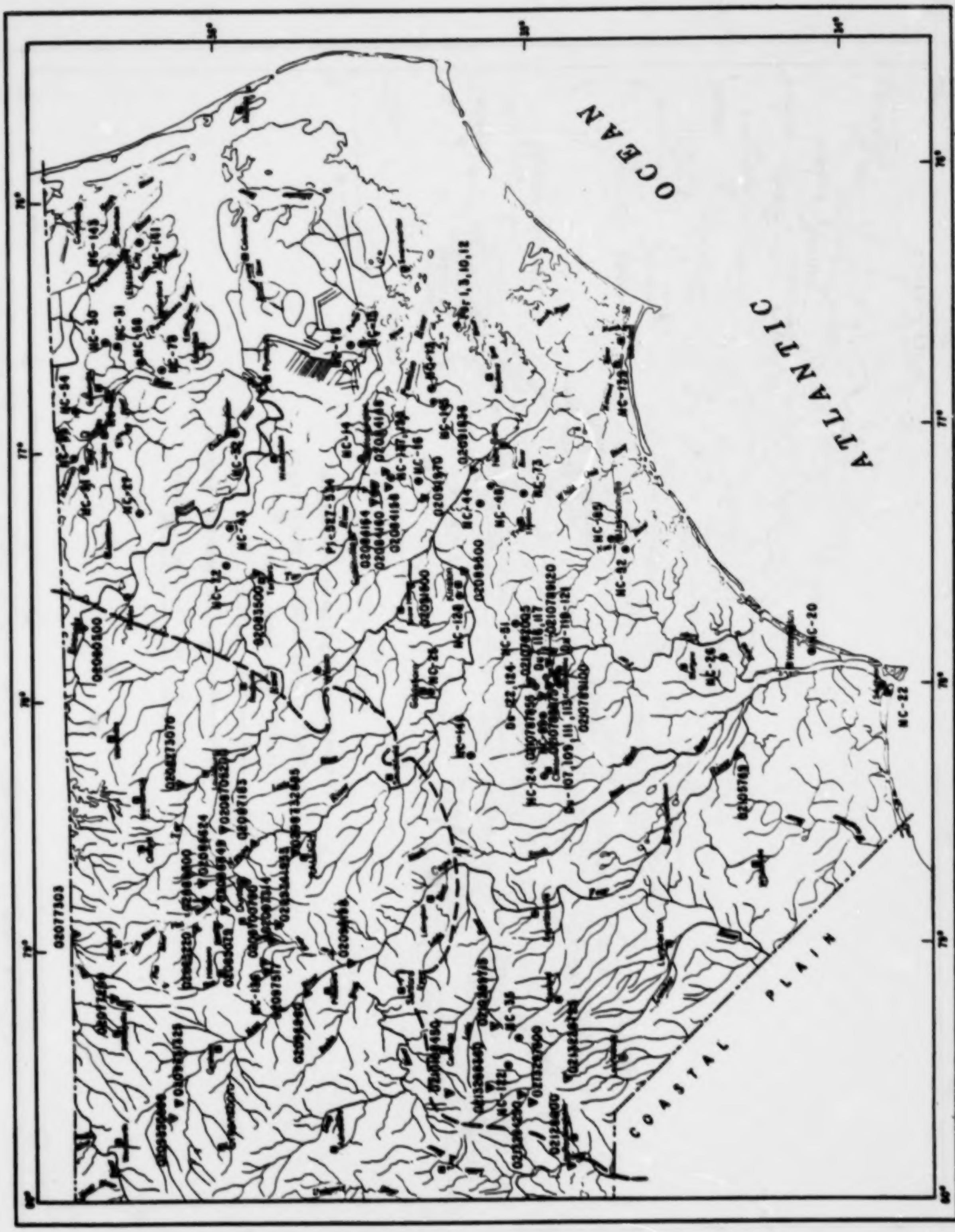
ATLANTIC
OCEAN
COASTAL PLAIN
NC-20
NC-22
NC-24
NC-42
NC-44
NC-72
NC-133
02077303

Figure 9.--Map of eastern part of North Carolina showing location of water-quality stations and observation well sites.

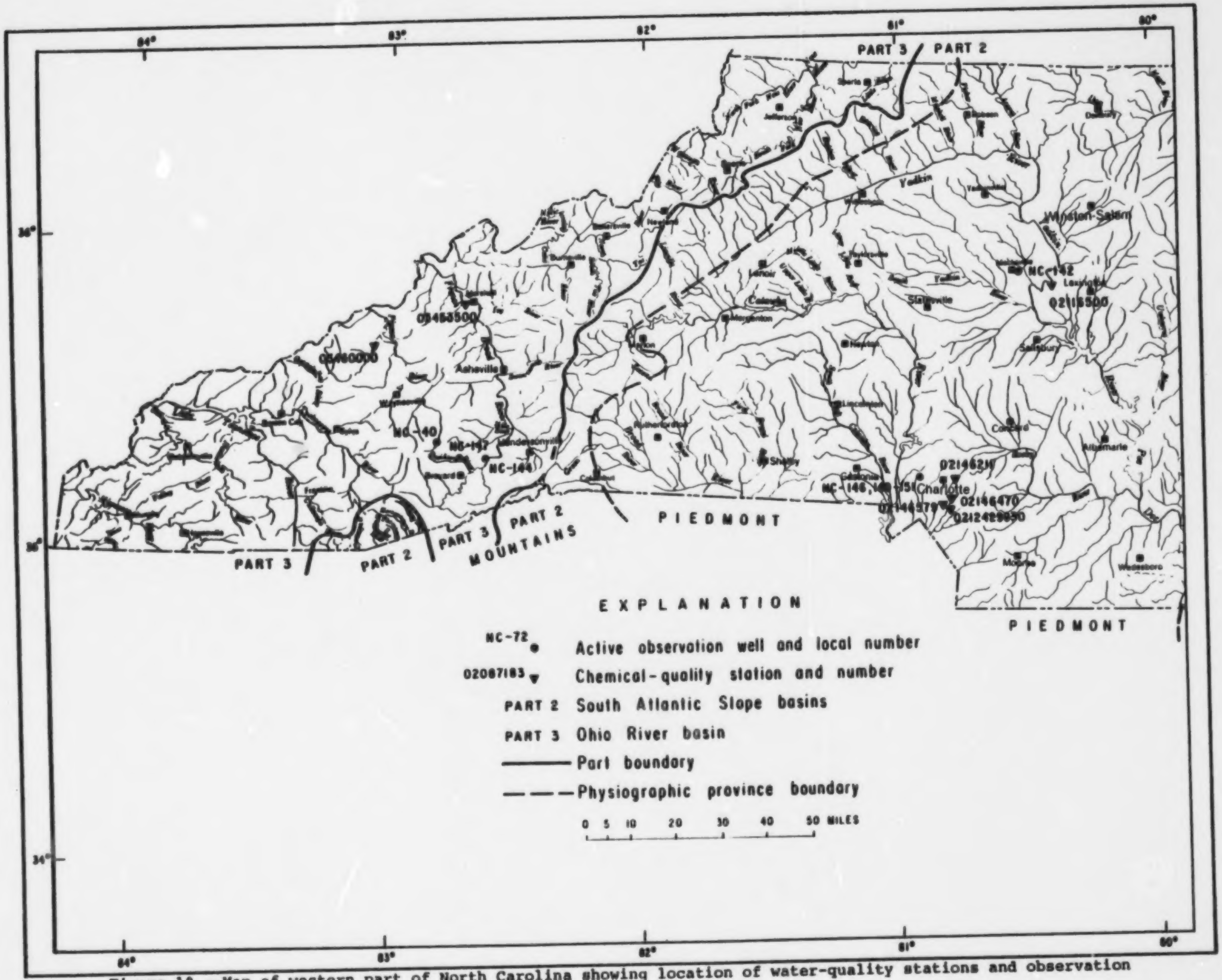
84°
83°
82°
81°
80°
36°
35°
34°
PART 3
PART 2
PART 3
PART 2
PART 3
PART 2
MOUNTAINS
PIEDMONT
PIEDMONT
Yadkin
Winston-Salem
NC-142
Lexington
02116500
Statesville
Salisbury
Concord
Albemarle
Lenoir
Morganton
Hickory
Lincolnton
Shelby
Rutherfordton
Gastonia
Charlotte
NC-146,148-151
02146211
02146470
02146579
0212429050
Monroe
Wadesboro
Asheville
03453500
03460000
Waynesville
NC-40
NC-147
NC-144
Hendersonville
Brevard
Franklin
Jefferson
Sparta
Danbury
Wilkesboro
EXPLANATION
NC-72 ● Active observation well and local number
02087183 ▼ Chemical-quality station and number
PART 2 South Atlantic Slope basins
PART 3 Ohio River basin
Part boundary
Physiographic province boundary
0 5 10 20 30 40 50 MILES

Figure 10.--Map of western part of North Carolina showing location of water-quality stations and observation well sites.

SOUTH ATLANTIC SLOPE BASINS

CHOWAN RIVER BASIN

02053200 POTECASI CREEK NEAR UNION, NC

LOCATION.--Lat 36°22'14", long 77°01'36", Hertford County, Hydrologic Unit 03010204, on right bank at downstream side of bridge on State Highway 11, 2.8 mi north of Union, 3 mi downstream from Cutawhiskie Swamp, and 3.5 mi upstream from Bells Branch.

DRAINAGE AREA.--225 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1953-57. March 1958 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3.53 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1958, nonrecording gage at same site and datum.

REMARKS.--Records good above 10 ft^3/s and poor below.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--27 years, 235 ft^3/s, 14.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,280 ft^3/s Sept. 8, 1979, gage height, 19.77 ft; minimum, 0.2 ft^3/s July 1, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1929 reached a stage of 19.1 ft, discharge, 4,050 ft^3/s, and flood of August 1940 reached a stage of 24.1 ft, discharge, 7,000 ft^3/s from rating curve extended above 4,000 ft^3/s, from information furnished by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,240 ft^3/s Sept 28, gage height, 14.49 ft; minimum, 3.5 ft^3/s June 4, 5; minimum gage height, 1.77 ft Oct. 16, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	6.1	36	26	426	320	104	13	5.4	8.6	155	14
2	18	7.6	31	25	906	346	85	14	4.9	8.0	272	15
3	16	6.9	60	45	1360	362	69	17	4.6	7.4	308	15
4	13	6.0	94	170	1520	332	58	18	3.9	6.8	207	14
5	10	6.1	76	302	1490	310	49	18	4.1	5.9	213	14
6	8.7	7.2	88	293	1390	280	43	17	45	5.6	173	13
7	7.9	7.1	106	298	1250	234	39	16	40	14	117	13
8	7.2	7.1	96	302	1010	192	35	15	103	19	72	14
9	7.0	7.5	99	274	808	162	31	14	313	11	44	14
10	6.5	8.3	101	233	630	137	28	12	313	9.4	30	14
11	6.2	9.4	96	196	483	116	26	11	194	119	25	14
12	5.6	10	88	162	606	103	28	11	116	115	16	15
13	5.4	11	79	136	1060	92	24	11	103	28	13	16
14	5.2	11	69	119	1030	82	23	12	36	18	13	17
15	4.7	13	61	106	947	74	22	13	11	14	15	19
16	e4.5	14	54	94	854	66	30	11	8.4	15	15	21
17	4.5	15	48	93	738	64	60	6.0	21	21	16	23
18	5.6	16	44	117	596	67	38	5.1	29	17	17	23
19	5.7	21	41	136	457	60	48	5.2	266	16	20	25
20	5.4	20	38	124	355	54	51	6.1	99	15	27	25
21	5.8	23	35	e116	286	50	36	5.9	13	14	40	26
22	5.9	25	34	e94	235	61	25	6.1	8.1	13	100	31
23	6.0	23	33	e86	199	142	18	5.8	5.5	14	161	35
24	5.5	23	30	e80	173	169	14	5.3	4.3	15	172	35
25	5.9	23	28	71	153	215	11	6.7	4.0	18	150	34
26	6.4	25	28	71	203	241	8.7	8.1	4.4	28	113	62
27	6.1	27	27	72	355	221	7.6	8.0	5.0	26	65	1340
28	6.0	29	27	70	339	206	8.6	6.9	4.8	28	34	2200
29	5.7	31	27	73	---	185	9.9	5.6	4.9	192	22	1970
30	5.7	36	27	75	---	157	11	5.0	6.3	117	16	1630
31	6.2	---	26	106	---	128	---	5.6	---	100	15	---
TOTAL	230.3	475.3	1727	4165	19859	5228	1040.8	314.4	1780.6	1038.7	2656	7701
MEAN	7.43	15.8	55.7	134	709	169	34.7	10.1	59.4	33.5	85.7	257
MAX	18	36	106	302	1520	362	104	18	313	192	308	2200
MIN	4.5	6.0	26	25	153	50	7.6	5.0	3.9	5.6	13	13
CFSM	.03	.07	.25	.60	3.15	.75	.15	.04	.26	.15	.38	1.14
IN.	.04	.08	.29	.69	3.28	.86	.17	.05	.29	.17	.44	1.27

CAL YR 1984 TOTAL 109199.5 MEAN 298 MAX 2500 MIN 4.5 CFSM 1.32 IN. 18.05
WTR YR 1985 TOTAL 46216.1 MEAN 127 MAX 2200 MIN 3.9 CFSM .56 IN. 7.64

e Estimated

02053200 POTECASI CREEK NEAR UNION, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/09	1300	WATER	0	1.90	7	86		18.0	13.0	4.1	30
84/11/08	1130	WATER	0	1.85	7	91		10.0		3.1	80
84/12/04	1130	WATER	0	3.87	92	82		6.0		5.9	200
85/01/15	1130	WATER	0	4.05	106			.0	22.0	11.8	90
85/02/12	1100	WATER	0	4.00	103						
85/02/27	1200	WATER	0	6.73	367			9.0		7.7	780
85/03/12	1100	WATER	0	4.00	103			12.0		7.4	40
85/04/23	1100	WATER	0	2.54	3			19.0	15.0	4.0	20
85/05/28	1100	WATER	0	2.80	6	101		19.0		3.6	40
85/06/27	1400	WATER	0	2.69	5			22.0		2.6	10
85/07/26	1200	WATER	0	3.30	37	100		24.0	50.0	4.5	430
85/[illegible]/30	1730	WATER	0.1	12.25	1560	57	6.30	18.0		4.1	60

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/09	1300	WATER	0		2	130	.12	.060	.400	.100	.010K
84/11/08	1130	WATER	0		2	140	.04	.080	.500	.110	.010
84/12/04	1130	WATER	0		7	180	.01K	.010K	.300	.090	.020
85/01/15	1130	WATER	0		5	110	.05	.010	.300	.060	.010K
85/02/27	1200	WATER	0		16	160	.28	.080	.600	.150	.020
85/03/12	1100	WATER	0		10	110					
85/04/23	1100	WATER	0		5	120	.08	.080	.900	.120	.010K
85/05/28	1100	WATER	0		3	140	.25	.120	.600	.110	.010K
85/06/27	1400	WATER	0			140	.25	.120	.600	.150	.010
85/07/26	1200	WATER	0		10	130	.21	.140	.600	.130	.200
85/09/30	1730	WATER	0.1	5	8	140	.11	.030	.400	.080	.020

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/09	1300	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/15	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/26	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02053500 AHOSKIE CREEK AT AHOSKIE, NC

LOCATION.--Lat 36°16'48", long 77°00'00", Hertford County, Hydrologic Unit 03010203, on right bank 10 ft downstream from bridge on State Highways 11 and 42, 0.5 mi upstream from Seaboard Coast Line Railroad bridge, and 0.8 mi southwest of Ahoskie.

DRAINAGE AREA.--57.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1950 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 17.46 ft above National Geodetic Vertical Datum of 1929 (Soil Conservation Service bench mark). Prior to Jan. 4, 1963, present site at datum 4.00 ft higher. Jan. 20, 1950 to May 24, 1951, nonrecording gage.

REMARKS.--Records fair above 10 ft³/s and poor below. Entire basin above station canalized since July 1964. Excavation began downstream in July 1962 and reached the station in December 1962. Stretch was recanalized beginning in September 1984 and completed October 1984.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--35 years, 63.6 ft³/s, 13.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,580 ft³/s Oct. 5, 1964, gage height, 10.72 ft; maximum gage height, 12.49 ft June 1, 1984; no flow at times during most years prior to canalization; minimum daily since canalization, 1.1 ft³/s Sept. 24, 25, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1940 reached a stage of 15.1 ft, present datum, from floodmark witnessed by local resident (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 720 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Sept. 27	0700	*1,040	*9.67	No other peak greater than base discharge.			

Minimum discharge, 1.5 ft³/s Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	5.7	5.7	5.4	202	64	16	4.8	3.9	6.4	23	3.6
2	5.5	6.1	5.5	5.6	261	76	14	4.8	3.8	7.7	214	3.4
3	4.6	5.8	25	13	192	68	13	6.3	4.1	6.5	111	3.3
4	e4.2	5.8	15	39	106	55	12	6.0	3.9	5.9	51	3.2
5	e4.0	6.1	10	40	77	48	12	5.3	4.1	5.3	22	3.1
6	e3.8	6.5	18	21	136	42	12	4.7	61	6.5	13	3.0
7	e3.6	6.1	14	15	110	35	11	4.5	15	22	10	2.9
8	e3.6	5.8	9.9	12	75	32	10	4.5	7.4	11	8.5	2.8
9	e3.5	5.8	8.2	10	56	27	9.9	4.3	6.9	7.0	8.0	2.6
10	e3.5	6.1	7.6	9.9	45	24	9.5	4.2	5.4	9.0	7.2	2.5
11	e3.4	6.2	7.0	9.4	38	23	9.1	4.2	5.4	121	6.6	2.3
12	e3.4	5.8	6.9	9.6	362	23	9.2	4.2	11	52	6.3	2.2
13	e3.2	5.8	6.1	9.4	333	18	8.8	4.2	51	19	5.9	2.3
14	e3.2	5.8	5.9	9.2	174	20	8.8	4.2	14	12	5.8	2.1
15	e3.0	6.0	5.9	8.7	119	15	8.9	4.0	6.9	9.8	5.6	2.0
16	e2.9	5.9	5.9	8.5	90	14	9.0	3.8	32	8.9	5.2	2.0
17	e3.0	5.8	5.9	11	72	15	8.9	3.8	79	53	5.1	1.8
18	e3.2	5.9	6.2	19	60	15	8.0	3.9	65	17	6.0	1.7
19	e3.4	6.3	5.9	16	52	14	7.6	3.9	159	8.2	5.8	1.7
20	e3.6	6.6	6.0	13	46	13	7.3	3.5	50	6.4	5.2	1.8
21	e4.0	7.6	6.0	17	42	13	6.8	3.5	20	5.7	5.1	1.7
22	e4.2	6.3	6.0	11	37	20	6.4	3.7	12	5.2	4.9	14
23	4.6	6.6	5.8	9.9	33	40	6.2	3.5	9.2	4.8	4.7	4.0
24	4.7	7.0	5.6	9.7	30	41	5.8	4.3	7.5	4.7	4.6	2.7
25	4.6	7.0	5.7	9.7	28	61	5.7	4.1	6.5	17	5.2	2.2
26	4.8	6.9	5.7	10	112	48	5.4	3.9	5.9	59	4.6	66
27	4.9	7.0	5.9	10	108	38	5.3	3.7	5.7	15	4.4	906
28	5.0	7.2	5.8	9.3	79	31	5.3	3.8	5.5	93	4.2	785
29	5.4	6.9	5.8	9.8	---	26	5.1	3.9	5.4	145	4.0	323
30	5.1	6.4	5.7	9.6	---	21	4.9	4.2	6.8	72	3.9	94
31	5.7	---	5.3	41	---	18	---	4.2	---	32	3.7	---
TOTAL	127.2	188.8	243.9	431.7	3075	998	261.9	131.9	673.3	848.0	574.5	2248.9
MEAN	4.10	6.29	7.87	13.9	110	32.2	8.73	4.25	22.4	27.4	18.5	75.0
MAX	5.7	7.6	25	41	362	76	16	6.3	159	145	214	906
MIN	2.9	5.7	5.3	5.4	28	13	4.9	3.5	3.8	4.7	3.7	1.7
CFSM	.06	.10	.12	.22	1.74	.51	.14	.07	.35	.43	.29	1.18
IN.	.07	.11	.14	.25	1.81	.59	.15	.08	.40	.50	.34	1.32

CAL YR 1984	TOTAL	30649.3	MEAN	83.7	MAX	1480	MIN	2.4	CFSM 1.32	IN.	18.01
WTR YR 1985	TOTAL	9803.1	MEAN	26.9	MAX	906	MIN	1.7	CFSM .42	IN.	5.76

e Estimated

02053500 AHOSKIE CREEK AT AHOSKIE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/09	1130	WATER	0	1.32	4	112		19.0	12.0	10.4	90
84/11/08	1230	WATER	0	1.04	6	106		9.0		8.0	1400
84/12/04	1230	WATER	0	.71	14	95		7.0		7.1	960
85/01/15	1200	WATER	0	1.08	9			.0	25.0	12.4	40
85/02/27	1300	WATER	0	2.28	104			10.0		9.0	820
85/03/12	1230	WATER	0	1.36	24			14.0		9.0	150
85/04/23	1230	WATER	0	1.02	6			21.0	13.0	9.5	50
85/05/28	1200	WATER	0	.95	4	122		24.0		11.5	10
85/06/27	1230	WATER	0	.95	6			22.0		10.4	130
85/07/26	1305	WATER	0	1.54	38	70		25.0	380.0	5.8	120000
85/09/30	1625	WATER	0.1	2.84	101	80	6.10	18.0		6.7	

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/09	1130	WATER	0		12	150	.27	.030	.300	.150	.010
84/11/08	1230	WATER	0		4	140	.79	.100	.400	.210	.080
84/12/04	1230	WATER	0		18	130	.44	.220	.600	.310	.140
85/01/15	1200	WATER	0		4	150	.80	.320	.500	.170	.020
85/02/27	1300	WATER	0		28	180	.60	.110	.600	.140	.020
85/03/12	1230	WATER	0		6	130	.54	.090	.400	.130	.010
85/04/23	1230	WATER	0		13	120	.09	.040	.300	.280	.030
85/05/28	1200	WATER	0		4	130	.04	.020	.500	.140	.020
85/06/27	1230	WATER	0		9	120	.05	.010	.200	.120	.020
85/07/26	1305	WATER	0		140	330	.45	.050	1.000	.370	.080
85/09/30	1625	WATER	0.1	11	21	160	1.40	.090	.400	.100	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/09	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/15	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	1230	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/26	1305	WATER	0	10K	20K	50K	20K	100K	.2K	100K	60

K Less than noted value.

ROANOKE RIVER BASIN

02068500 DAN RIVER NEAR FRANCISCO, NC

LOCATION.--Lat 36°30'53", long 80°18'11", Stokes County, Hydrologic Unit 03010103, on left bank 200 ft upstream from bridge on State Highway 704, 700 ft downstream from remains of Georges Mill, 0.2 mi downstream from Elk Creek, 3 mi east of Francisco, and 7.9 mi downstream from Little Dan River.

DRAINAGE AREA.--129 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1924 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1930-50 (monthly runoff). WSP 1433: 1925-26, 1928-29, 1931, 1942, 1948. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 831.99 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 15, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since 1938, considerable diurnal fluctuation and regulation by Talbott and Townes reservoirs and Pinnacles Hydroelectric Plant in Virginia, 28 mi upstream (stations 02067800, 02067820).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--61 years, 191 ft³/s, 20.11 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s Aug. 17, 1985, gage height, 19.50 ft, from rating curve extended above 8,400 ft³/s on basis of slope-area measurement at gage height 18.11 ft; minimum, 7.1 ft³/s Sept. 8, 1932, gage height, 0.43 ft; minimum daily, 27 ft³/s Aug. 24, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1916 reached a stage of about 15 ft, from information by local residents, discharge, 16,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 23	0300	2,080	4.65	Aug. 17	2330	*21,200	*19.50

Minimum discharge, 58 ft³/s Nov. 1, 3, 16; minimum gage height, 1.22 ft Apr. 10; minimum daily, 62 ft³/s Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	70	96	83	320	124	127	122	126	127	107	233
2	134	62	93	94	428	122	110	130	126	106	127	231
3	116	63	97	176	227	106	136	146	102	111	116	229
4	112	86	112	244	165	104	111	127	128	122	111	211
5	101	147	119	174	181	105	98	122	189	125	107	212
6	97	114	149	128	167	101	126	120	199	126	108	206
7	92	109	140	121	133	112	133	133	111	127	105	173
8	94	115	101	118	133	102	129	95	113	119	171	179
9	101	105	94	123	142	105	130	89	99	107	175	168
10	100	91	93	125	128	102	77	94	93	101	124	152
11	99	96	92	128	113	102	103	107	118	144	117	143
12	101	90	90	97	292	103	116	110	92	108	89	103
13	108	105	89	e95	192	101	112	98	86	108	120	98
14	117	101	88	e105	158	100	98	143	105	109	108	93
15	88	84	88	e95	132	99	103	137	107	102	98	93
16	100	64	87	e85	123	106	216	279	118	106	95	95
17	119	85	88	e100	121	110	190	207	106	81	1500	94
18	95	84	86	97	115	110	137	158	91	78	6430	93
19	118	93	87	95	113	123	125	137	85	75	1090	91
20	122	103	88	e90	112	97	132	129	82	73	550	89
21	128	112	90	e80	94	93	135	126	81	89	533	89
22	96	110	94	e90.	99	116	107	136	80	75	361	89
23	120	94	89	e100	108	220	137	574	80	98	327	89
24	160	91	86	e110	108	161	111	394	85	76	333	108
25	98	85	87	e110	111	119	168	263	102	151	384	108
26	92	86	83	e110	133	121	137	194	106	139	367	133
27	88	85	84	e110	119	120	131	156	82	349	345	140
28	95	146	84	e110	113	120	131	171	80	210	278	95
29	119	171	84	e110	---	120	127	167	83	157	261	81
30	124	105	83	e120	---	122	123	155	122	122	249	81
31	91	---	83	118	---	121	---	131	---	107	235	---
TOTAL	3384	2952	2924	3541	4380	3567	3816	5150	3177	3728	15121	3999
MEAN	109	98.4	94.3	114	156	115	127	166	106	120	488	133
MAX	160	171	149	244	428	220	216	574	199	349	6430	233
MIN	88	62	83	80	94	93	77	89	80	73	89	81
(†)	-11	0	-1	-1	+25	-1	+4	0	-5	-4	+19	-19

CAL YR 1984	TOTAL	70747	MEAN	193	MAX	1240	MIN	62	MEAN♦	191	CFSM♦	1.48	IN.♦ 20.15
WTR YR 1985	TOTAL	55739	MEAN	153	MAX	6430	MIN	62	MEAN♦	153	CFSM♦	1.19	IN.♦ 16.07

e Estimated

† Change in contents, equivalent in cubic feet per second, in Talbott and Townes Reservoirs; provided by city of Danville, Va.

♦ Adjusted for change in contents.

02068500 DAN RIVER NEAR FRANCISCO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/04	0920	WATER	0	1.56	118	37	6.90	11.0	2.7	10.2	220
84/11/13	0925	WATER	0	1.71	145	33	7.00	6.0		11.6	40
84/12/03	0935	WATER	0	1.47	95	35	7.10	7.0		11.6	80
85/01/22	1020	WATER	0	2.27	130	31	6.80	.0	3.5	13.5	40
85/02/27	0925	WATER	0	1.56	118	38	7.20	12.0		10.8	20
85/03/26	0915	WATER	0	1.56	118	34	6.40	8.0		11.7	10K
85/04/22	1120	WATER	0	1.47	108	35	7.80	20.0	14.0	9.3	70
85/05/20	1110	WATER	0	1.56	129	37	7.70	18.0		9.4	240
85/06/12	0910	WATER	0	1.44	104	43	7.10	23.0		8.2	160
85/07/11	1130	WATER	0	1.60	124	51	7.40	23.0	380.0	8.1	6500
85/08/12	1105	WATER	0.1	1.43	93	46	7.80	23.0		8.2	280
85/09/18	1055	WATER	0.1	1.37	91	47	7.70	15.0		9.9	330

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/04	0920	WATER	0	14	11	69	.21	.010	.200	.030	.010K
84/11/13	0925	WATER	0	13	14	71					
84/12/03	0935	WATER	0	14	2	31					
85/01/22	1020	WATER	0	13	2	100	.40	.030	.200	.020	.010K
85/02/27	0925	WATER	0	13	5	48					
85/03/26	0915	WATER	0	10	4	61					
85/04/22	1120	WATER	0	13	20	73	.29	.010	.100	.030	.010K
85/05/20	1110	WATER	0	13	46	100					
85/06/12	0910	WATER	0	15	43	94					
85/07/11	1130	WATER	0	15	370	500	.58	.010	.600	.430	.010
85/08/12	1105	WATER	0.1	12	41	110					
85/09/18	1055	WATER	0.1	15	12	58					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/04	0920	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/22	1020	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/22	1120	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/11	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50

K Less than noted value.

ROANOKE RIVER BASIN

02071000 DAN RIVER NEAR WENTWORTH, NC

LOCATION.--Lat 36°24'45", long 79°49'35", Rockingham County, Hydrologic Unit 03010103, on right bank 600 ft downstream from Settles Bridge on Secondary Road 2150, 3.5 mi northwest of Wentworth, 7.5 mi downstream from Mayo River, and 103.7 mi upstream from mouth.

DRAINAGE AREA.--1,053 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1303.

REVISED RECORDS.--WDR NC-72-1: 1945(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 512.98 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 3, 1949, water-stage recorder at site 150 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation and regulation at low flow caused by Talbott and Townes reservoirs (stations 02067800, 02067820).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 1,209 ft³/s, 15.59 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,200 ft³/s June 22, 1972, gage height, 31.60 ft, from high-water mark in well; minimum, 65 ft³/s Oct. 8, 1954, gage height, 0.93 ft; minimum daily, 107 ft³/s Oct. 2, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 34.9 ft, from information by North Carolina State Highway Commission, and flood in 1937 reached a stage of 29.8 ft, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 19	0630	*30,800	*25.56	No other peak greater than base discharge.			

Minimum discharge, 234 ft³/s July 21, 22, gage height, 1.01 ft.; minimum daily, 246 ft³/s July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	555	644	514	2180	765	608	488	511	427	1230	840
2	866	531	595	521	5990	751	609	481	481	479	1460	785
3	585	497	615	1060	3700	734	564	543	472	446	848	750
4	541	486	608	3520	1650	693	573	559	443	409	661	714
5	519	675	600	2720	1270	689	564	488	466	370	583	672
6	497	769	898	1220	1320	667	553	469	1160	360	509	650
7	488	614	876	929	1340	637	582	457	1020	359	464	633
8	485	561	708	813	1110	645	574	466	775	348	659	590
9	489	556	650	737	826	665	557	423	629	320	797	579
10	496	548	609	692	852	647	546	416	507	303	631	623
11	492	544	594	671	827	625	513	444	453	348	488	573
12	482	552	577	662	3190	625	520	542	579	412	441	518
13	480	520	564	592	2950	607	543	499	500	488	393	469
14	475	518	554	592	1600	597	539	436	417	657	401	441
15	501	515	544	592	1240	595	540	489	399	472	366	424
16	464	520	541	524	1060	581	701	2130	410	474	340	421
17	473	495	539	620	982	584	1010	1360	443	426	446	418
18	498	501	537	645	932	582	807	955	462	315	13600	412
19	484	565	533	603	809	567	663	670	392	278	23700	404
20	500	620	537	581	772	578	606	560	363	261	3170	397
21	502	565	541	e400	739	566	582	528	343	248	4040	389
22	517	534	556	e600	703	610	561	640	334	246	2810	385
23	620	536	555	e600	691	864	518	1230	325	279	1410	384
24	578	524	528	e650	699	1030	533	1720	321	309	1130	381
25	721	519	522	e700	719	858	583	1360	317	557	1550	383
26	585	510	515	e750	1280	664	646	949	315	2270	1320	377
27	542	508	508	775	1110	627	554	700	327	1310	1580	386
28	520	580	512	764	896	620	548	593	290	1890	1360	410
29	798	1230	514	707	---	619	548	576	309	1450	1070	357
30	798	837	513	645	---	612	507	552	440	1000	968	335
31	625	---	509	645	---	599	---	540	---	1330	1300	---
TOTAL	17641	17485	18096	26044	41437	20503	17752	22263	14203	18841	69725	15100
MEAN	569	583	584	840	1480	661	592	718	473	608	2249	503
MAX	1020	1230	898	3520	5990	1030	1010	2130	1160	2270	23700	840
MIN	464	486	508	400	691	566	507	416	290	246	340	335
CFSM	.54	.55	.55	.80	1.41	.63	.56	.68	.45	.58	2.14	.48
IN.	.62	.62	.64	.92	1.46	.72	.63	.79	.56	.67	2.46	.53

CAL YR 1984 TOTAL 494744 MEAN 1352 MAX 15800 MIN 397 CFSM 1.28 IN. 17.48
WTR YR 1985 TOTAL 299090 MEAN 819 MAX 23700 MIN 246 CFSM .78 IN. 10.57

e Estimated

ROANOKE RIVER BASIN

02071000 DAN RIVER NEAR WENTWORTH, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/04	1120	WATER	0	1.71	540	49	7.00	15.0	18.0	9.6	550
84/11/05	0930	WATER	0	1.89	626						
84/11/08	1245	WATER	0	1.77	568						
84/11/13	1100	WATER	0	1.67	520	53	7.30	7.0		11.1	130
84/12/03	1105	WATER	0.1	1.87	617		7.10				200
84/12/03	1105	WATER	0.914634			50	7.10	8.0		11.7	200
85/01/22	1155	WATER	0	2.11	600	46	7.10	.0	4.5	13.6	50
85/02/27	1040	WATER	0	2.81	1100	56	7.30	13.0		10.1	340
85/03/26	1040	WATER	0	1.96	661	52	6.90	10.0		10.8	30
85/04/22	1010	WATER	0	1.82	592	60	7.50	20.0	10.0	8.4	30
85/05/20	0955	WATER	0	1.76	564	56	7.40	19.0		8.6	280
85/06/12	1040	WATER	0	1.80	583	62	7.50	25.0		7.1	860
85/07/11	1010	WATER	0	1.26	334	66	7.20	24.0	24.0	7.0	240
85/08/12	0950	WATER	0.1	1.51	443	60	7.50	25.0		7.4	390
85/09/18	0940	WATER	0.1	1.45	416	66	7.00	16.0		8.9	120

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/04	1120	WATER	0	20	15	85	.13	.020	.200	.060	.010
84/11/13	1100	WATER	0	21	7	81					
84/12/03	1105	WATER	0.1	19	7	58					
84/12/03	1105	WATER	0.914634	19	7	58					
85/01/22	1155	WATER	0	22	3	100	.27	.060	.200	.020	.010
85/02/27	1040	WATER	0	18	24	89					
85/03/26	1040	WATER	0	16	4	78					
85/04/22	1010	WATER	0	21	16	76	.20	.020	.200	.050	.020
85/05/20	0955	WATER	0	21	89	160					
85/06/12	1040	WATER	0	22	48	130					
85/07/11	1010	WATER	0	24	20	75	.16	.120	.300	.060	.020
85/08/12	0950	WATER	0.1	23	34	100					
85/09/18	0940	WATER	0.1	22	6	65					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/04	1120	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/22	1155	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/22	1010	WATER	0	10K	20K	50K	20K	100K	.2K	100K	90
85/07/11	1010	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

ROANOKE RIVER BASIN

02074000 SMITH RIVER AT EDEN, NC

LOCATION.--Lat 36°31'31", long 79°45'57", Rockingham County, Hydrologic Unit 03010103, on right bank at Eden, 0.3 mi downstream from bridge on State Highway 14, 0.8 mi upstream from bridge on Secondary Road 1714, 1.2 mi south of Virginia-North Carolina State line, 1.3 mi downstream from Stuart Creek, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--538 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1970 published as "at Spray".

REVISED RECORDS.--WSP 1433: 1946.

GAGE.--Water-stage recorder. Datum of gage is 539.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since August 1950 by Philpott Lake 40 mi upstream (usable capacity, 6,325,000,000 ft³). Additional regulation by hydroelectric plant at Martinsville, Virginia 18 mi upstream.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 621 ft³/s, 15.68 in/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,600 ft³/s Aug. 15, 1940, gage height, 19.28 ft, from rating curve extended above 12,000 ft³/s on basis of computation of peak flow over dam 1.5 mi downstream; minimum, 38 ft³/s Aug. 7, 1967; minimum daily, 46 ft³/s Aug. 14, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,600 ft³/s Aug. 18, gage height, 15.40 ft; minimum, 84 ft³/s July 21, 22, gage height, 1.45 ft; minimum daily 108 ft³/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	627	452	410	342	1320	471	398	415	870	276	1870	220
2	473	376	200	445	1900	381	405	362	154	493	1040	471
3	404	361	387	1220	974	214	400	401	307	464	644	1100
4	390	185	420	2440	713	409	400	326	411	366	200	1240
5	380	428	441	1030	690	440	404	143	437	465	261	1260
6	377	439	687	584	828	423	355	297	477	397	448	1190
7	163	405	534	532	825	410	165	348	441	121	584	1000
8	277	347	410	683	746	421	303	330	395	192	1090	185
9	368	443	233	827	532	355	444	357	170	402	805	282
10	374	379	386	816	330	196	396	352	313	400	595	452
11	368	196	424	800	414	390	398	298	387	488	192	415
12	370	349	415	669	1740	417	365	167	385	389	240	426
13	299	383	413	223	1120	405	370	315	381	422	439	374
14	219	386	409	347	709	405	164	345	376	127	433	390
15	249	386	362	426	592	407	348	349	336	229	400	174
16	381	392	175	407	398	335	496	650	134	437	453	201
17	367	336	355	425	344	177	466	541	281	432	621	454
18	369	168	398	442	502	366	417	371	377	394	15300	337
19	373	373	404	434	565	392	406	211	363	390	3220	392
20	413	425	399	203	587	388	353	327	360	373	2480	390
21	172	391	415	300	586	392	167	456	365	108	2390	344
22	326	331	389	579	576	429	328	476	329	140	1440	181
23	382	434	178	536	395	528	359	1330	125	648	1370	175
24	627	300	289	501	285	298	372	1970	219	442	1140	424
25	521	205	388	526	395	444	481	1180	340	618	778	338
26	382	340	433	328	605	436	427	1070	326	1910	662	373
27	271	386	384	231	534	426	354	1050	333	786	1360	381
28	243	591	388	355	485	419	164	1020	344	442	1350	360
29	489	832	356	412	---	384	350	1060	327	471	1170	162
30	465	506	161	398	---	313	333	987	130	572	1130	157
31	361	---	345	461	---	258	---	1020	---	714	979	---
TOTAL	11480	11525	11588	17922	19690	11729	10788	18524	10193	14108	45084	13848
MEAN	370	384	374	578	703	378	360	598	340	455	1454	462
MAX	627	832	687	2440	1900	528	496	1970	870	1910	15300	1260
MIN	163	168	161	203	285	177	164	143	125	108	192	157
†	-18	-5	-4	+18	+83	+16	+1	+23	-61	-100	+211	-177

CAL YR 1984	TOTAL	263614	MEAN	720	MAX	5220	MIN	149	MEAN‡	712	CFSM‡ 1.32	IN.‡ 18.02
WTR YR 1985	TOTAL	196479	MEAN	538	MAX	15300	MIN	108	MEAN‡	537	CFSM‡ 1.00	IN.‡ 13.55

(†) Change in contents, equivalent in cubic feet per second, in Philpott Lake; provided by U. S. Army Corps of Engineers.
(‡) Adjusted for change in contents.

02074000 SMITH RIVER AT EDEN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/03	0930	WATER	0	1.96	244	170	7.00	13.0	16.0	9.2	440
84/11/05	0930	WATER	0	2.24	364	232	7.00	17.0		9.4	130
84/12/05	1230	WATER	0	1.90	220	115	7.30	6.0		11.2	60
85/01/02	1230	WATER	0	2.02	268	89	7.50	13.0	3.7	9.9	50
85/02/21	1400	WATER	0	2.35	420	110	7.50	10.0		11.8	20
85/03/13	1240	WATER	0	1.86	205	126	7.50	12.0		10.7	20
85/04/16	0950	WATER	0	2.05	280	179	7.20	19.0	3.4	8.4	10K
85/04/30	0930	WATER	0	1.97	248	203	7.00	17.5		7.7	
85/05/07	0905	WATER	0	2.00	260	231	7.33	19.5		8.0	
85/05/14	0925	WATER	0	1.87	209	263	7.20	23.0		7.0	10
85/06/04	0915	WATER	0	2.05	280			22.0		7.9	
85/06/11	0925	WATER	0	1.76	170	214	7.20	24.0		7.0	10K
85/07/02	1320	WATER	0	2.35	421	171	7.50	20.0	7.8	7.8	10K
85/07/16	0945	WATER	0	2.01	264	350		25.0			
85/08/01	0930	WATER	0.1	3.78	1640	63	7.30	20.0		8.0	5200
85/09/24	0935	WATER	0.1	3.12	1040	462	7.60	20.0		7.8	140

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/03	0930	WATER	0	27	9	160	.41	.070	.300	.230	.170
84/11/05	0930	WATER	0	30	5	170					
84/12/05	1230	WATER	0	25	5	130					
85/01/02	1230	WATER	0	27	5	77	.52	.140	.300	.140	.090
85/02/21	1400	WATER	0	29	7	96					
85/03/13	1240	WATER	0	25	6	100					
85/04/16	0950	WATER	0	33	8	150	.40	.190	.500	.280	.220
85/05/14	0925	WATER	0	34	5	180					
85/06/11	0925	WATER	0	31	8	160					
85/07/02	1320	WATER	0	31	8	150	.46	.180	.600	.250	.180
85/08/01	0930	WATER	0.1	19	470	610					
85/09/24	0935	WATER	0.1	38	11	280					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/03	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/02	1230	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/16	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/02	1320	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

ROANOKE RIVER BASIN

02077200 HYCO CREEK NEAR LEASBURG, NC

LOCATION.--Lat 36°23'57", long 79°11'50", Caswell County, Hydrologic Unit 03010104, on right bank 10 ft upstream from bridge on U.S. Highway 158, 1.5 mi upstream from Kilgore Creek, and 2.5 mi west of Leasburg.

DRAINAGE AREA.--45.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1964 to current year. Prior to October 1968 published as North Hyco Creek near Leasburg.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.08 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those below 5 ft³/s, which are poor.

AVERAGE DISCHARGE.--21 years, 45.3 ft³/s, 13.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,720 ft³/s July 14, 1975, gage height, 39.84 ft, from rating curve extended above 1,200 ft³/s; no flow at times during most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 4	0530	945	33.50	Aug. 18	1900	*1,940	*35.14
Feb. 2	1530	1,010	33.64	Aug. 31	1230	1,670	34.77

Minimum discharge, 0.12 ft³/s July 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	5.3	8.7	7.7	313	62	19	3.9	3.0	e3.1	10	148
2	19	6.0	6.9	12	790	56	17	3.7	2.7	3.4	21	54
3	7.4	4.7	26	281	309	50	16	7.0	2.2	2.7	15	34
4	4.6	3.2	30	733	127	46	15	8.9	2.1	1.8	8.4	25
5	3.4	3.4	e31	299	95	45	14	5.4	2.0	e1.4	5.5	19
6	2.5	3.8	159	95	109	40	15	4.2	1.6	e1.1	3.9	15
7	2.1	3.3	59	59	122	36	13	3.7	1.5	e.90	3.4	12
8	2.2	2.8	32	45	87	35	11	3.4	1.8	e.70	3.2	10
9	2.3	2.5	24	36	71	34	11	2.8	2.3	.37	3.8	8.7
10	2.2	2.5	20	31	65	33	9.6	2.8	1.9	.29	3.9	7.7
11	2.0	3.8	17	28	61	31	9.1	2.9	e1.2	5.1	2.6	6.6
12	1.9	6.7	15	26	188	31	9.2	3.3	e1.0	1.0	1.6	6.0
13	1.9	5.3	13	23	164	29	9.4	3.6	e1.3	2.1	1.8	5.5
14	2.0	3.6	12	22	93	27	9.8	3.2	e1.5	10	1.6	4.8
15	2.0	3.0	11	20	75	26	9.8	2.6	e1.0	11	1.5	4.3
16	2.0	3.1	11	18	66	25	9.9	9.6	e.90	7.3	1.3	4.0
17	2.0	4.3	9.9	18	61	24	10	18	e1.4	2.6	4.5	3.6
18	2.5	3.7	13	21	56	24	9.0	13	5.2	1.2	790	3.6
19	2.5	4.7	11	19	53	22	8.3	7.4	2.6	.66	528	3.3
20	2.7	12	10	16	51	22	7.8	4.4	e1.2	.42	92	3.0
21	2.8	9.1	9.8	12	48	22	7.0	6.0	e1.0	.28	117	3.0
22	3.8	6.2	9.8	11	46	24	6.6	10	e.80	.16	166	3.0
23	4.9	4.5	11	12	45	33	6.0	23	e.75	.15	79	3.8
24	3.7	4.1	9.5	14	44	30	5.5	24	e.70	.12	35	4.4
25	3.3	4.1	8.9	15	43	29	5.4	18	e.65	5.8	42	4.0
26	3.2	4.0	8.3	13	141	26	5.1	12	e.66	22	44	5.6
27	3.2	3.8	7.9	12	130	23	4.9	8.3	e.68	17	33	4.2
28	2.8	5.5	7.9	14	76	22	4.9	5.9	e1.0	56	115	3.3
29	3.2	18	7.9	15	---	22	5.0	4.4	e5.6	44	48	2.6
30	6.9	13	7.9	16	---	21	4.4	3.6	9.6	19	64	2.1
31	6.1	---	8.0	27	---	20	---	3.1	---	11	747	---
TOTAL	149.1	160.0	616.4	1970.7	3529	970	287.7	232.1	59.84	232.65	2993.0	414.1
MEAN	4.81	5.33	19.9	63.6	126	31.3	9.59	7.49	1.99	7.50	96.5	13.8
MAX	38	18	159	733	790	62	19	24	9.6	56	790	148
MIN	1.9	2.5	6.9	7.7	43	20	4.4	2.6	.65	.12	1.3	2.1
CFSM	.10	.12	.43	1.39	2.75	.68	.21	.16	.04	.16	2.10	.30
IN.	.12	.13	.50	1.60	2.86	.79	.23	.19	.05	.19	2.43	.34

CAL YR 1984 TOTAL 21371.91 MEAN 58.4 MAX 1550 MIN .76 CFSM 1.27 IN. 17.32
WTR YR 1985 TOTAL 11614.59 MEAN 31.8 MAX 790 MIN .12 CFSM .69 IN. 9.41

e Estimated

02077200 HYCO CREEK NEAR LEASBURG, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1964 to current year.

INSTRUMENTATION.--Temperature recorder since May 1964.

REMARKS.--Miscellaneous chemical data published for water years, 1959, 1965-67; 1959 data published as North Hyco Creek near Leasburg (station 02077202). Prior to October 1967 daily water temperature data published as North Hyco Creek near Leasburg.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 29.5°C Aug. 11, 12, 1980; minimum, 0.0°C on several days during winter months in most years.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 27.0°C July 15, 16; minimum, 0.0°C on several days in January and February.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	14.0	19.5	18.5	5.5	5.0	10.5	9.5	2.0	1.0	9.0	7.0
2	14.5	14.0	19.0	18.0	5.5	5.0	11.0	10.5	3.5	2.0	9.0	7.0
3	14.0	11.5	18.5	14.5	7.0	5.0	11.0	7.0	3.5	3.5	9.5	9.5
4	14.5	12.0	14.5	14.0	6.5	5.5	8.0	6.5	3.5	3.0	10.0	9.0
5	16.0	14.0	14.5	13.5	5.5	5.0	6.5	6.0	3.0	3.0	13.5	10.0
6	16.5	16.0	14.5	12.0	5.0	5.0	6.0	4.5	3.0	3.0	13.0	10.5
7	16.0	15.5	12.0	10.0	5.0	2.0	4.5	4.0	3.0	3.0	10.5	8.0
8	17.0	16.0	10.0	8.5	3.0	1.5	4.0	4.0	3.0	1.5	10.5	8.5
9	18.0	16.0	9.5	8.5	1.5	1.0	4.0	3.0	1.5	.0	11.5	10.5
10	18.5	17.0	10.0	8.5	3.0	1.5	3.5	3.0	1.0	.0	11.0	9.0
11	18.5	17.0	11.0	9.5	4.5	3.0	2.0	2.0	2.0	.5	10.5	9.0
12	18.5	16.0	11.0	9.5	5.0	4.0	2.0	1.0	3.5	2.0	12.0	9.0
13	18.0	15.0	9.5	8.0	6.0	5.0	1.0	.5	3.5	1.5	12.0	10.0
14	16.5	14.5	8.0	6.5	8.0	6.0	1.0	1.0	2.0	1.5	11.5	11.0
15	16.0	14.5	7.0	6.5	8.5	7.0	1.0	.5	1.5	1.5	12.0	9.5
16	18.0	15.5	9.0	7.0	8.5	8.0	1.0	.5	2.0	1.0	11.0	8.5
17	18.0	17.0	8.0	8.0	9.5	8.0	1.0	.5	2.0	1.5	12.0	10.0
18	18.5	16.5	6.5	6.5	10.0	8.5	1.0	.5	3.5	2.0	11.0	9.0
19	20.0	18.0	6.0	6.0	11.0	10.0	2.0	1.0	5.0	3.5	10.0	6.5
20	20.5	19.0	6.0	6.0	11.0	11.0	3.0	.5	6.0	5.0	11.0	7.0
21	20.5	20.0	6.0	6.0	11.0	11.0	.5	.0	6.0	4.0	10.5	9.0
22	20.5	20.0	4.5	4.5	11.5	11.0	.0	.0	8.0	5.5	9.0	7.0
23	21.0	20.0	3.5	3.5	11.0	8.0	.0	.0	9.0	7.0	9.0	6.5
24	21.0	20.0	3.5	3.5	8.5	5.5	.0	.0	11.5	9.0	10.5	9.0
25	20.5	19.5	3.5	3.5	8.0	6.0	.0	.0	13.0	11.5	10.5	9.5
26	20.0	19.5	4.0	4.0	7.0	5.0	.0	.0	13.0	10.0	11.5	8.5
27	20.0	18.0	5.0	5.0	7.0	5.5	.0	.0	11.0	10.5	13.5	9.5
28	20.0	19.0	7.0	7.0	8.5	7.0	.0	.0	10.5	8.5	16.0	11.5
29	20.5	20.0	7.0	7.0	9.0	8.0	.0	.0	---	---	19.5	15.5
30	20.5	20.0	6.5	6.5	9.5	8.5	.5	.0	---	---	21.0	18.5
31	20.0	19.5	---	---	9.5	9.5	1.0	.5	---	---	20.5	18.0
MONTH	21.0	11.5	19.5	3.5	11.5	1.0	11.0	.0	13.0	.0	21.0	6.5

ROANOKE RIVER BASIN

02077200 HYCO CREEK NEAR LEASBURG, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18.5	15.0	21.0	16.0	24.5	20.5	19.5	19.5	25.5	24.5	21.0	20.5
2	16.5	13.5	23.5	18.5	24.5	21.0	21.5	19.0	24.5	23.0	21.5	20.0
3	14.5	11.0	19.0	18.0	24.5	21.0	23.5	21.0	23.5	20.0	23.0	21.5
4	16.5	12.0	18.5	14.5	24.5	21.5	25.0	21.5	22.0	19.5	24.5	22.0
5	18.5	15.0	19.0	14.5	26.0	23.5	25.5	23.5	22.0	19.5	25.0	23.0
6	19.0	19.5	20.5	16.0	25.5	24.0	25.5	24.0	22.0	21.0	25.5	23.5
7	18.0	14.0	21.0	18.0	24.5	23.0	26.5	23.5	23.5	21.5	25.5	23.5
8	15.5	12.0	21.0	18.5	24.0	21.5	25.5	23.0	23.5	23.5	25.5	23.5
9	13.5	10.0	20.0	17.0	25.0	21.5	25.0	24.0	24.0	23.5	26.0	24.0
10	12.0	8.5	20.5	18.5	26.5	23.0	25.5	24.0	25.0	23.0	26.0	24.5
11	13.0	10.0	22.0	16.0	27.0	24.5	26.0	23.0	25.5	23.0	26.0	24.5
12	17.0	11.5	23.0	20.5	26.0	24.5	26.0	24.5	25.5	24.0	24.5	21.0
13	16.0	15.0	24.5	21.0	24.5	20.5	25.0	24.0	26.0	24.0	21.0	19.0
14	17.0	16.0	25.0	21.0	21.5	18.0	25.0	23.0	26.5	24.5	19.5	15.0
15	17.0	15.5	25.0	21.5	23.0	18.5	27.0	24.0	26.5	24.5	17.0	14.0
16	19.0	16.0	24.0	21.0	23.5	21.5	27.0	24.5	25.5	24.0	16.5	14.5
17	19.5	15.5	21.5	19.5	25.0	20.5	26.0	24.5	25.0	23.5	16.5	14.5
18	20.0	14.5	20.5	10.0	25.5	23.0	25.5	24.0	23.5	22.0	17.0	15.0
19	21.5	16.5	21.0	17.0	25.0	23.0	25.0	23.0	23.0	22.0	18.0	15.0
20	23.0	17.0	21.0	17.0	24.5	21.5	25.5	24.0	23.0	23.0	18.5	16.5
21	22.0	18.0	22.0	19.0	23.0	19.5	26.0	25.0	23.0	21.5	19.0	18.0
22	22.0	18.0	21.5	19.5	23.0	19.5	26.0	25.5	21.5	21.0	19.0	19.0
23	21.0	17.0	21.0	20.0	25.0	21.0	26.0	24.5	21.0	20.0	19.5	18.5
24	20.5	17.0	21.0	18.0	26.0	22.0	25.0	23.5	20.0	19.5	20.0	18.5
25	22.0	18.5	19.5	16.5	26.0	23.0	24.0	23.5	21.0	19.5	20.0	19.0
26	20.5	16.5	20.5	16.5	26.0	22.0	25.0	23.0	22.0	21.0	19.5	19.0
27	20.0	17.0	21.5	18.0	24.5	20.5	24.5	23.0	23.0	21.5	20.0	19.0
28	21.0	18.0	21.5	19.5	22.0	20.0	23.5	22.0	23.0	21.5	20.0	16.5
29	22.0	18.5	21.5	19.5	23.0	19.0	22.0	21.5	22.0	21.5	18.5	15.5
30	21.0	16.0	21.0	19.5	19.5	19.0	24.5	22.0	23.0	20.5	18.0	15.0
31	---	---	21.0	19.5	---	---	26.0	24.0	21.0	20.5	---	---
MONTH	23.0	8.5	25.0	14.5	27.0	18.0	27.0	19.0	26.5	19.5	26.0	14.0
YEAR	27.0	.0										

02077200 HYCO CREEK NEAR LEASBURG, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/02	1020	WATER	0	25.17	8	128	7.60	14.0	7.0	9.4	20
85/02/21	1105	WATER	0	25.59	48	84	6.60	6.0		11.8	50
85/03/13	1005	WATER	0	25.43	29	113	7.00	11.0		10.4	70
85/04/16	1220	WATER	0	25.15	15	121	7.70	19.0	6.8	9.0	40
85/05/14	1145	WATER	0	24.80	4	135	7.60	23.0		7.2	30
85/06/11	1130	WATER	0	24.57	1	132	7.50	26.0		6.8	10
85/07/02	1025	WATER	0.1	24.74	4	110	7.30	20.0	220.0	6.1	630
85/08/01	1245	WATER	0.1	25.28	4	115	7.30	25.0		6.9	510
85/09/24	1200	WATER	0.1	25.13	5	122	7.30	20.0		7.2	90

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/02	1020	WATER	0	49	1	100	.03	.020	.200	.020	.010K
85/02/21	1105	WATER	0	26	6	88					
85/03/13	1005	WATER	0	35	5	96					
85/04/16	1220	WATER	0	47	4	120	.01	.010	.300	.030	.010K
85/05/14	1145	WATER	0	56	6	120					
85/06/11	1130	WATER	0	58	6	120					
85/07/02	1025	WATER	0.1	35	190	430	.37	.100	.700	.290	.020
85/08/01	1245	WATER	0.1	40	32	160					
85/09/24	1200	WATER	0.1	53	4	110					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/02	1020	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/16	1220	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/02	1025	WATER	0.1	10K	20K	50K	30	100K	.2K	100K	30

K Less than noted value.

ROANOKE RIVER BASIN

02077303 HYCO RIVER BELOW AFTERBAY DAM NEAR McGEHEES MILL, NC

LOCATION.--Lat 36°31'24", long 78°59'48", Person County, Hydrologic Unit 03010104, on right bank 600 ft downstream from afterbay dam of Carolina Power and Light Company, 1.2 mi upstream from Ghent Creek, and 1.8 mi east-northeast of McGehees Mill.

DRAINAGE AREA.--202 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 342.98 ft above National Geodetic Vertical Datum of 1929 (levels by Carolina Power and Light Company). August 1964 to September 1973 at site 2.8 mi upstream at datum 349.78 ft above National Geodetic Vertical Datum of 1929, published as Hyco River at McGehees Mill, NC.

REMARKS.--No estimated daily discharges. Records good above 5 ft³/s and fair below. Flow regulated by Roxboro Steam-Electric Generating Plant Afterbay Reservoir (station 02077302).

AVERAGE DISCHARGE.--12 years, 196 ft³/s, 13.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s July 14, 1975, gage height, 24.40 ft; no flow part of day June 26, 1980; minimum daily, 0.31 ft³/s Sept. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,180 ft³/s Jan. 5, gage height, 13.46 ft; minimum daily, 7.8 ft³/s May 7-12, 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	18	9.6	11	558	133	18	8.4	12	9.6	9.5	437
2	27	11	9.6	11	1440	133	17	8.3	11	9.6	9.2	464
3	25	10	9.3	177	1970	134	17	8.2	11	8.7	9.2	381
4	27	10	9.9	1180	1350	134	17	8.1	9.7	8.8	8.9	188
5	28	9.6	12	2080	626	128	17	7.9	9.7	8.9	8.9	156
6	28	9.2	12	1460	352	127	17	7.9	9.5	9.2	8.8	135
7	28	9.0	12	488	299	127	17	7.8	9.4	9.2	8.9	132
8	28	9.2	12	68	297	126	17	7.8	9.7	9.2	8.7	132
9	28	9.2	12	17	275	125	17	7.8	9.9	9.2	8.7	131
10	30	9.2	12	23	191	126	17	7.8	9.9	9.2	8.7	85
11	28	9.2	12	50	134	118	17	7.8	9.7	9.2	8.7	41
12	28	9.2	12	62	427	106	14	7.8	9.7	9.2	8.7	30
13	26	9.2	12	63	577	107	12	8.0	9.7	9.0	8.7	16
14	26	9.2	12	96	466	71	12	8.3	10	9.1	8.7	10
15	25	9.2	13	110	240	15	12	8.5	10	9.1	8.7	10
16	25	9.2	13	120	151	15	11	8.4	9.7	9.2	8.6	10
17	25	9.7	13	133	160	15	11	8.3	9.7	9.1	8.5	9.8
18	25	9.7	13	70	156	15	11	8.3	9.7	9.0	8.3	9.7
19	25	9.7	13	34	147	16	11	8.2	9.7	9.0	769	9.7
20	25	9.7	13	34	137	16	11	8.0	9.5	8.9	1030	9.7
21	25	9.7	12	34	135	16	11	7.8	9.6	8.7	835	9.7
22	25	9.7	11	34	134	16	11	7.8	9.7	9.0	585	9.7
23	25	9.7	11	34	134	15	11	7.8	9.6	9.2	335	9.7
24	23	9.7	11	34	133	15	11	11	9.4	9.2	227	9.7
25	26	9.7	11	34	130	83	9.5	22	9.4	9.2	134	9.7
26	27	9.7	11	33	129	122	8.7	21	9.7	9.2	145	9.7
27	26	9.7	11	34	392	122	8.7	12	9.6	9.2	153	9.7
28	26	9.7	11	34	328	122	8.2	12	9.7	9.2	149	9.7
29	26	9.6	11	54	---	57	8.0	12	9.5	9.2	151	9.7
30	26	9.7	11	67	---	17	8.3	11	9.2	9.2	151	9.7
31	26	---	11	67	---	17	---	11	---	9.2	173	---
TOTAL	818	295.3	358.4	6746	11468	2389	388.4	297.0	294.6	282.9	4995.4	2493.9
MEAN	26.4	9.84	11.6	218	410	77.1	12.9	9.58	9.82	9.13	161	83.1
MAX	30	18	13	2080	1970	134	18	22	12	9.6	1030	464
MIN	23	9.0	9.3	11	129	15	8.0	7.8	9.2	8.7	8.3	9.7

CAL YR 1984 TOTAL 96653.6 MEAN 264.1 MAX 4570 MIN 5.9
WTR YR 1985 TOTAL 30826.9 MEAN 84.5 MAX 2080 MIN 7.8

02077303 HYCO RIVER BELOW AFTERBAY DAM NEAR McGEHEES MILL, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1981 to September 1983.
WATER TEMPERATURE: June 1974 to current year.

INSTRUMENTATION.--Temperature recorder since June 1974. Water-quality monitor from October 1981 to September 1983.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1982-83): Maximum, 197 microsiemens Dec. 6, 1981; minimum, 89 microsiemens May 16, 1983.
WATER TEMPERATURE: Maximum, 33.5°C July 20, 21, 22, 1977; minimum, 2.0°C Jan. 11, 12, 13, Feb. 1, 1977.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 27.5°C Aug. 20, 21, Sept. 3, 4; minimum, 2.5°C Jan. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	19.0	20.5	19.5	9.0	8.0	11.5	10.0	4.0	4.0	10.0	9.5
2	19.5	19.0	20.5	18.0	9.0	8.0	12.0	11.5	4.0	4.0	11.0	9.5
3	19.5	18.5	18.0	16.0	9.5	8.5	11.5	10.0	5.0	4.0	10.0	9.5
4	19.5	18.5	16.5	16.0	9.5	8.5	11.5	10.0	6.5	5.0	10.5	9.5
5	19.0	18.5	17.0	15.5	9.0	8.5	14.0	10.0	7.5	6.5	12.5	9.5
6	19.5	19.5	15.0	11.5	9.0	9.0	13.0	11.5	7.5	7.0	12.0	11.0
7	19.5	19.0	11.5	10.0	9.0	9.0	12.5	11.5	7.5	7.5	11.0	10.5
8	19.0	19.0	11.5	10.0	9.0	9.0	11.5	10.0	7.5	7.0	12.0	11.0
9	20.0	19.0	13.0	10.0	9.0	9.0	10.0	9.5	7.0	6.5	12.0	11.0
10	19.5	19.0	13.0	10.0	9.0	9.0	9.5	9.0	6.5	6.5	11.5	11.0
11	20.0	19.0	15.0	11.5	9.0	8.5	9.5	9.0	6.5	6.5	11.5	11.0
12	20.0	19.0	11.5	10.0	9.0	8.5	9.0	8.5	6.5	6.5	12.5	11.5
13	20.0	19.0	10.5	9.5	9.0	8.5	8.5	8.0	6.5	6.0	12.5	11.0
14	20.0	19.0	11.0	9.0	9.0	8.5	8.0	8.0	6.5	6.0	12.5	11.0
15	20.0	19.0	11.0	9.0	9.0	8.5	7.5	7.0	6.5	6.0	12.5	11.0
16	20.0	19.5	11.5	9.5	9.0	9.0	7.0	7.0	6.5	6.0	12.0	10.5
17	20.0	19.5	10.5	9.0	9.0	9.0	7.0	7.0	6.5	6.0	12.5	11.0
18	20.5	19.5	10.5	9.0	9.5	9.0	7.0	7.0	6.5	6.0	12.0	10.5
19	20.5	20.0	10.5	10.0	9.5	9.0	7.0	6.5	7.0	6.0	12.0	9.5
20	21.0	20.5	10.0	9.0	10.0	9.5	6.5	4.5	7.0	6.5	12.0	9.5
21	21.0	20.5	9.5	8.5	10.0	9.5	4.5	4.0	7.0	6.5	11.5	10.5
22	21.0	21.0	9.5	8.5	12.0	9.5	4.5	4.0	8.0	6.5	10.5	9.5
23	21.5	21.0	9.5	8.5	11.5	10.0	4.0	3.5	9.0	7.5	11.5	9.5
24	21.5	20.5	9.5	8.5	11.0	9.0	4.0	3.5	10.0	8.0	12.0	10.5
25	20.5	20.5	9.5	8.5	11.0	9.5	4.0	3.5	9.5	9.5	11.0	9.5
26	21.5	20.5	9.0	8.0	10.0	9.0	3.5	3.0	9.5	9.0	11.0	10.5
27	21.0	20.5	10.0	8.0	10.5	9.5	3.5	2.5	11.0	9.0	12.0	10.5
28	21.5	21.0	11.5	8.5	10.5	9.5	3.5	3.0	10.5	9.5	12.5	10.5
29	21.5	21.5	9.5	8.5	11.5	10.0	3.5	3.5	---	---	14.5	12.5
30	21.5	20.5	9.0	8.0	12.0	10.5	4.0	3.5	---	---	14.5	12.5
31	20.5	20.5	---	---	11.0	10.0	4.0	3.5	---	---	13.0	12.0
MONTH	21.5	18.5	20.5	8.0	12.0	8.0	14.0	2.5	11.0	4.0	14.5	9.5

ROANOKE RIVER BASIN

02077303 HYCO RIVER BELOW AFTERBAY DAM NEAR McGEHEES MILL, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	10.5	16.5	14.0	20.0	19.0	18.5	18.5	23.0	22.0	26.5	26.5
2	14.0	12.5	16.0	15.0	19.5	18.0	20.0	18.5	22.5	21.5	27.0	26.5
3	13.5	11.5	15.5	14.5	20.0	13.5	20.5	18.5	22.5	21.0	27.5	26.0
4	14.5	12.5	16.5	14.0	19.5	18.0	20.5	18.5	23.0	21.0	27.5	26.5
5	15.0	13.5	16.5	14.0	20.0	18.5	20.5	19.0	23.0	21.0	27.0	26.5
6	15.5	14.0	16.5	15.0	19.0	18.5	20.5	19.5	22.5	21.5	26.5	26.0
7	15.5	13.5	17.0	15.5	19.0	19.0	21.5	19.5	23.5	22.0	26.5	26.0
8	15.0	13.5	16.5	15.5	20.0	18.0	21.0	19.0	23.5	22.5	26.5	26.0
9	14.0	12.5	16.5	15.0	20.0	18.0	21.0	20.0	23.5	22.5	26.5	26.0
10	13.5	12.0	17.0	15.5	20.5	18.5	21.5	20.0	23.5	22.5	26.5	26.0
11	13.5	12.0	17.5	16.0	20.0	18.5	21.5	19.5	23.5	22.0	26.0	25.0
12	15.0	12.5	17.5	16.0	20.0	18.5	21.5	19.5	23.5	22.5	25.0	23.5
13	14.5	13.0	18.5	16.5	19.0	17.5	22.0	20.0	24.0	22.5	24.0	23.0
14	14.0	13.5	18.5	16.0	19.0	17.0	21.5	20.0	24.0	23.0	23.5	21.5
15	14.0	13.5	19.5	16.5	19.5	17.5	22.0	20.5	24.0	23.0	23.5	21.5
16	15.0	13.5	19.0	17.5	20.0	18.5	22.0	20.5	24.0	23.0	23.5	22.0
17	16.0	13.0	18.5	17.0	20.0	18.5	22.0	20.5	23.5	23.5	23.5	21.5
18	15.0	12.5	18.5	16.5	20.5	18.5	22.0	20.0	23.5	23.0	23.5	22.0
19	15.5	14.0	18.5	16.5	19.5	18.5	22.0	20.0	27.0	23.0	23.5	22.0
20	15.5	13.5	18.5	16.5	19.5	18.5	22.0	20.5	27.5	27.0	23.0	22.5
21	15.5	13.0	19.0	17.5	19.5	17.5	22.5	21.0	27.5	27.0	23.5	22.5
22	15.5	13.5	18.5	17.5	19.5	18.0	22.5	21.0	27.0	26.5	23.0	22.0
23	15.5	13.0	19.0	17.5	20.5	18.5	22.0	21.0	27.0	26.5	23.5	22.0
24	15.0	13.5	18.0	17.0	20.5	18.5	22.0	20.5	27.0	26.0	23.0	22.0
25	16.0	14.5	19.0	17.5	20.5	18.5	21.5	21.0	26.0	25.5	23.0	22.0
26	15.5	13.5	19.0	17.5	20.5	13.0	23.0	21.5	26.5	26.0	22.5	22.0
27	15.0	14.0	19.5	17.5	19.5	18.0	22.5	21.5	26.5	26.0	23.0	21.5
28	17.0	14.5	19.0	17.5	19.5	18.0	22.0	21.5	26.5	26.0	22.5	20.5
29	17.5	14.5	19.0	18.0	20.0	18.5	22.5	21.5	26.5	26.0	22.0	20.0
30	16.0	13.5	19.0	17.5	19.0	18.5	23.0	21.5	27.0	26.0	22.0	20.0
31	---	---	19.5	18.0	---	---	23.0	22.0	27.0	26.0	---	---
MONTH	17.5	10.5	19.5	14.0	20.5	13.0	23.0	18.5	27.5	21.0	27.5	20.0
YEAR	27.5	2.5										

02077303 HYCO RIVER BELOW AFTERBAY DAM NR MCGEHEES MILL, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/29	0920	WATER	0	3.91	26	85	7.00	21.0		8.0	10K
84/11/06	1000	WATER	0	3.62	9	75	7.50	15.0	3.0	9.0	10K
84/12/05	0930	WATER	0	3.66	12	55	7.50	7.0		11.0	10K
85/01/30	1115	WATER	0	4.36	66	57		5.0		12.5	10K
85/02/18	1230	WATER	0	5.04	154	65	7.40	5.0	8.9	12.2	10K
85/03/18	1130	WATER	0	3.72	15	72	7.00	9.0		10.7	10K
85/04/24	1030	WATER	0	3.64	11	88	7.30	21.0		7.6	10K
85/05/20	1110	WATER	0	3.60	8	90	7.10	18.0	8.8	9.4	10K
85/06/25	1100	WATER	0	3.61	9	105	7.10	23.0		9.2	10K
85/07/18	1040	WATER	0	3.61	9	111	7.10	24.0		8.4	10K
85/08/30	1150	WATER	0.1	5.02	285	131	7.20	24.0	2.6	9.0	10K
85/09/19	1100	WATER	0.1	3.60	10	120	7.20	22.0		9.7	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	0920	WATER	0	23	6	74					
84/11/06	1000	WATER	0	28	6	78	.01	.040	.200	.030	.010
84/12/05	0930	WATER	0	27	7	93					
85/01/30	1115	WATER	0		1	110					
85/02/18	1230	WATER	0	88	4	98	.12	.010	.200	.030	.010K
85/03/18	1130	WATER	0	24	7	95					
85/04/24	1030	WATER	0	61	1	120					
85/05/20	1110	WATER	0	20	6	100K	.14	.080	.400	.040	.010
85/06/25	1100	WATER	0	25	4	86					
85/07/18	1040	WATER	0	30	3	98					
85/08/30	1150	WATER	0.1	29	3	100	.01	.030	.300	.020	.010K
85/09/19	1100	WATER	0.1	27	4	120					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/06	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/18	1230	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/20	1110	WATER	0	10K	20K	60	20K	100K	.2K	100K	20K
85/08/30	1150	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02077670 MAYO CREEK NEAR BETHEL HILL, NC

LOCATION.--Lat 36°32'26", long 78°52'21" Person County, Hydrologic Unit 03010104, on right bank 0.1 mi upstream from Virginia State line, 0.3 mi downstream from Mayo Steam Electric Generating Plant Dam, 2.9 mi northeast of Bethel Hill, and 4.8 mi downstream from Spoonwater Creek.

DRAINAGE AREA.--53.5 mi².

PERIOD OF RECORD.--August 1977 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 338.84 ft above National Geodetic Vertical Datum of 1929 (levels by Carolina Power & Light Company).

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Mayo Steam Electric Generating Plant Dam.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--8 years, 35.4 ft³/s, 8.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,950 ft³/s Apr. 26, 1978; no flow Aug. 1-13, 1977, Aug. 28 to Sept. 30, 1980 and many days during 1981 and 1982 due to regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 4, 1974 reached a stage of 11.11 ft from floodmarks, discharge, 4,300 ft³/s; no flow July 31, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 180 ft³/s Feb. 2, gage height, 3.54 ft; minimum, 0.49 ft³/s Oct. 26, gage height, 1.48 ft; minimum daily, 0.76 ft³/s Oct. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	2.0	2.2	1.9	51	61	12	3.6	3.8	3.2	3.2	2.9
2	1.9	2.0	2.3	2.4	152	57	10	3.4	1.7	3.2	3.2	2.9
3	2.0	2.1	3.1	18	180	52	9.9	2.9	1.3	3.0	3.2	2.9
4	2.0	2.2	2.0	67	154	49	8.7	1.9	1.5	3.1	3.2	2.9
5	1.9	2.2	4.4	94	135	46	9.2	1.9	1.9	3.1	3.2	2.9
6	1.9	2.2	3.0	91	130	39	7.6	1.9	1.6	3.0	3.2	3.0
7	1.9	2.2	2.2	84	118	36	5.0	1.8	2.2	3.0	3.2	3.6
8	1.9	2.2	2.2	75	106	35	4.1	1.8	3.2	3.0	3.6	3.8
9	2.0	2.2	2.0	66	93	31	2.9	1.8	3.5	3.0	3.2	3.8
10	2.1	2.1	2.0	59	83	28	2.4	1.8	3.6	3.0	3.2	3.8
11	2.3	2.1	2.0	54	75	27	2.4	1.9	3.6	3.1	3.1	4.0
12	2.4	2.0	2.0	48	105	25	2.2	1.8	3.6	3.0	3.0	3.5
13	2.4	2.0	2.0	41	109	22	2.4	1.8	3.6	3.0	3.0	2.9
14	2.4	2.0	2.0	37	101	20	2.5	1.8	3.6	3.0	3.0	2.9
15	2.4	2.2	2.0	32	89	18	2.8	1.8	3.5	3.0	3.1	2.9
16	2.4	2.2	2.0	27	82	17	3.7	1.8	3.4	3.4	3.1	2.9
17	2.3	2.2	2.0	27	74	16	3.4	1.8	3.4	4.1	3.2	2.9
18	2.3	2.2	2.0	25	66	14	2.4	1.8	3.4	4.0	9.9	2.9
19	2.2	2.4	2.0	23	61	12	2.1	1.8	3.2	3.6	3.4	2.9
20	2.2	1.9	2.0	21	55	11	1.9	1.8	3.2	3.2	3.8	2.9
21	2.3	2.0	2.0	20	50	9.0	1.8	1.7	3.3	3.1	3.2	2.9
22	2.5	2.0	2.1	18	46	9.2	1.8	1.8	3.2	3.2	3.0	2.9
23	2.3	2.2	2.1	16	44	12	1.8	2.4	3.2	3.2	3.0	2.9
24	2.2	2.3	2.0	15	41	13	1.8	2.1	3.2	3.2	3.0	2.9
25	1.6	2.3	2.0	14	39	16	1.9	1.8	3.2	3.4	2.9	2.9
26	.76	2.3	2.0	12	64	16	2.0	1.7	3.2	3.5	2.9	2.9
27	1.9	2.3	2.0	11	70	16	2.2	1.8	3.2	3.3	2.9	3.0
28	2.1	2.8	2.0	10	66	16	1.8	1.8	3.2	3.3	2.9	3.0
29	2.2	2.1	2.0	11	---	15	3.4	4.3	3.3	3.2	3.0	3.1
30	1.9	2.1	2.0	12	---	14	3.7	4.9	3.2	3.2	3.0	3.1
31	2.0	---	1.9	17	---	13	---	5.1	---	3.2	2.9	---
TOTAL	65.76	65.0	67.5	1049.3	2439	765.2	119.8	70.3	91.0	99.8	103.7	92.8
MEAN	2.12	2.17	2.18	33.8	87.1	24.7	3.99	2.27	3.03	3.22	3.35	3.09
MAX	3.1	2.8	4.4	94	180	61	12	5.1	3.8	4.1	9.9	4.0
MIN	.76	1.9	1.9	1.9	39	9.0	1.8	1.7	1.3	3.0	2.9	2.9

CAL YR 1984 TOTAL 20408.26 MEAN 55.8 MAX 539 MIN .76
WTR YR 1985 TOTAL 5029.16 MEAN 13.8 MAX 180 MIN .76

02077670 MAYO CREEK NR BETHEL HILL, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/30	0930	WATER	0	2.18	12	55		3.0		12.2	10K
85/02/18	1010	WATER	0	2.82	66	52	7.10	5.0	3.4	13.0	10K
85/03/18	1000	WATER	0	2.24	14	60	7.10	8.0		11.7	10K
85/04/24	0830	WATER	0	1.82	2	91	7.20	21.0		9.0	10K
85/05/20	0930	WATER	0	1.81	1	86	7.20	16.0	5.2	8.9	20
85/06/25	0930	WATER	0	1.90	3	89	7.10	21.0		8.2	10
85/07/18	0915	WATER	0.1	1.95	4	91	6.90	23.0		7.7	10
85/08/30	1010	WATER	0.1	1.89	3	101	7.20	24.0	2.6	8.3	10
85/09/19	0930	WATER	0.1	1.88	3	98	7.20	18.0		9.5	40

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/30	0930	WATER	0		3	80					
85/02/18	1010	WATER	0	142	4	72	.08	.060	.200	.010K	.010K
85/03/18	1000	WATER	0	35	2	67					
85/04/24	0830	WATER	0	116	1K	92					
85/05/20	0930	WATER	0	35	8	94	.10	.030	.300	.030	.010K
85/06/25	0930	WATER	0	33	7	72					
85/07/18	0915	WATER	0.1	37	5	83					
85/08/30	1010	WATER	0.1	38	5	130	.03	.030	.300	.010	.010K
85/09/19	0930	WATER	0.1	34	5	91					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/18	1010	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/20	0930	WATER	0	10K	20K	50K	20K	100K	.2	100K	20K
85/08/30	1010	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02080500 ROANOKE RIVER AT ROANOKE RAPIDS, NC
(National stream-quality accounting network station)

LOCATION.--Lat 36°27'37", long 77°38'04", Halifax County, Hydrologic Unit 03010107, on right bank 1.2 mi downstream from bridge on State Highway 48 at Roanoke Rapids, 2.5 mi upstream from Chockoyotte Creek, 2.8 mi downstream from Roanoke Rapids dam, and 133.6 mi upstream from mouth in Albemarle Sound.

DRAINAGE AREA.--8,384 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1911 to current year. Prior to January 1933, published as "at Old Gaston". Records published for both sites February 1930 to December 1932. Gage-height records collected at site of auxiliary gage since November 1890 are contained in reports of National Weather Service, NOAA, U.S. Department of Commerce.

REVISED RECORDS.--WSP 712: 1930. WSP 822: 1936. WSP 1032: 1912, 1928(M), 1930(M), 1932-33(M). WSP 1433: 1912-23, 1925-28, 1930, 1932-33, 1935, 1937-39. WSP 1904: 1958, 1960. WDR NC-83-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 43.84 ft above National Geodetic Vertical Datum of 1929. Dec. 7, 1911 to Nov. 21, 1921, and Apr. 7 to Dec. 31, 1932, nonrecording gage and Nov. 21, 1921 to Apr. 7, 1932, water-stage recorder, both at site 9 mi upstream at different datum. Aug. 6, 1941 to Mar. 1, 1973, auxiliary water-stage recorder, 3.6 mi downstream from base gage. Satellite data transmitter at station.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since August 1950 by Philpott Lake on Smith River, usable capacity, 6,325,000,000 ft³; since September 1950 by John H. Kerr Reservoir, usable capacity, 101,247,000,000ft³; since June 1955 by Roanoke Rapids Lake (station 02080100); since September 1962 by Leesville Lake, since October 1962 by Lake Gaston (station 02079964); and since September 1963 by Smith Mountain Lake.

AVERAGE DISCHARGE.--73 years (1913-85), 8,084 ft³/s adjusted for storage, 13.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 261,000 ft³/s Aug. 18, 1940, gage height, 39.0 ft from floodmarks; minimum, about 250 ft³/s Dec. 16, 1955; minimum daily, 472 ft³/s Sept. 21, 1932.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1877, discharge, 212,000 ft³/s, reached a stage of about 2 ft lower at Old Gaston than flood in August 1940 which was 21.5 ft. Flood in August 1940 is the maximum known since at least 1771.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,500 ft³/s Aug. 30, gage height, 8.55 ft; minimum, 968 ft³/s Nov. 1, gage height, 2.04 ft; minimum daily, 1,060 ft³/s Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4060	2050	4840	3160	5730	9880	2340	2080	6110	2240	2350	17500
2	2530	1260	5850	3280	8580	4490	2840	4620	6130	2150	2330	17200
3	2060	1420	6420	8730	7110	5960	2510	3320	7680	2250	2170	17400
4	2860	1490	8010	12400	10500	12000	2580	2040	7570	2160	2520	17400
5	1770	3090	4280	13600	13500	13100	2550	2040	6650	2160	2530	11400
6	1600	3770	8730	4920	13500	14300	2540	4880	6110	2120	2250	7100
7	1670	2340	13300	7320	13600	6680	2550	6110	5960	2020	4030	6550
8	1710	5030	3440	8310	13500	2490	2500	6040	2250	2020	4910	4930
9	1920	7270	2060	7410	13600	4020	3360	6060	3840	4140	7060	6060
10	1660	1700	4340	8980	2900	1530	3620	6030	8620	2140	4860	7480
11	1630	1060	6110	10800	5530	5400	2550	6040	8180	2780	2160	2570
12	1800	7870	7050	10700	9470	7910	2490	6050	2480	2220	3320	3040
13	1650	9650	1110	4450	10100	3590	2510	5930	3860	2290	5490	2390
14	1630	9080	1730	5050	13700	3110	2530	6170	2070	2580	6480	2180
15	1690	10900	1120	9790	14700	3150	2970	2450	2090	7430	6190	2320
16	1770	1280	2690	11400	17400	1150	2550	2320	2110	5480	4910	2160
17	2040	1810	5080	13200	14800	1550	2550	2130	4500	2340	3150	2100
18	1780	2490	4160	13100	14700	8030	2560	2060	2610	2290	2400	2110
19	1770	5530	3170	13400	11400	8630	2540	2000	2170	2240	8150	2130
20	1750	10900	7570	8600	14100	2490	2530	1990	2070	4490	13300	2100
21	2120	8930	9030	13500	16300	4510	2580	2030	2080	2280	15500	2090
22	5180	2280	2760	13500	7400	4900	2570	2070	2410	2130	18000	2150
23	2660	3040	2390	13600	7270	3380	2540	2210	2180	2130	18000	5780
24	3320	6450	3210	11900	5020	6470	2440	2110	3540	2850	18000	3320
25	2670	5690	3670	7050	12800	6250	2070	4880	2270	3750	18000	3770
26	1790	4880	10000	8580	14300	3280	2080	6190	2220	5930	17900	3630
27	1780	1560	6370	6660	10900	1550	2070	6190	2230	2240	18000	4670
28	2380	2580	5240	4150	14000	1380	2060	8110	2160	2580	18500	4370
29	7880	7320	5270	6570	---	1820	2120	6150	2210	2180	19100	2650
30	11500	5130	2170	3970	---	1380	2100	6140	2340	4480	19100	2100
31	4780	---	8280	8070	---	1320	---	6170	---	6830	16200	---
TOTAL	85410	137850	159450	276150	316410	155700	75800	132610	116700	94920	286860	170650
MEAN	2755	4595	5144	8908	11300	5023	2527	4278	3890	3062	9254	5688
MAX	11500	10900	13300	13600	17400	14300	3620	8110	8620	7430	19100	17500
MIN	1600	1060	1110	3160	2900	1150	2060	1990	2070	2020	2160	2090
(†)	+605	-1376	-472	+343	+2422	-9	+958	+670	-1541	-26	+3022	-3684

CAL YR 1984 TOTAL 3693230 MEAN 10090 MAX 20300 MIN 1060 MEAN‡ 9816 CFSM‡ 1.17 IN.‡ 15.93
WTR YR 1985 TOTAL 2008510 MEAN 5503 MAX 19100 MIN 1060 MEAN‡ 5576 CFSM‡ 0.67 IN.‡ 9.10

† Change in contents, equivalent in cubic feet per second, in Leesville and Smith Mountain Lakes, furnished by Appalachian Power Co.; Philpott and Kerr Reservoirs, furnished by U. S. Army Corps of Engineers; and Lake Gaston and Roanoke Rapids Lake, furnished by North Carolina Power Company.

‡ Adjusted for change in contents.

ROANOKE RIVER BASIN

02080500 ROANOKE RIVER AT ROANOKE RAPIDS, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1968-73, 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1976 to September 1984.
WATER TEMPERATURE: October 1948 to September 1949, October 1976 to September 1984.

REMARKS.--Station operated as part of NASQAN network from October 1976 to present. Samples collected at bridge on State Highway 48 at Roanoke Rapids, 1.2 mi upstream from gaging station. Miscellaneous chemical data collected at bridge on State Highway 48 and/or at gaging station 1.2 mi downstream are published for water years 1946-47, 1955-67.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1977-84): Maximum daily, 153 microsiemens Sept. 15, 1981; minimum daily, 65 microsiemens Apr. 7, 1979.
WATER TEMPERATURE (water years 1949, 1977-84): Maximum daily, 32.5°C July 30, 1949; minimum daily, 1.0°C Jan. 18-22, 30, 31, Feb. 1, 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV 08...	0800	12800	94	6.6	16.5	3.5	764	8.3	85	K3	K1	29
JAN 31...	1400	13500	103	6.3	2.0	2.5	757	12.8	93	K11	K1	30
MAY 29...	1315	6090	95	5.9	23.0	1.5	759	9.5	111	K5	<1	28
SEP 03...	1230	17400	125	7.2	26.0	2.5	764	6.0	74	K1	K2	33

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV 08...	0	6.8	2.8	6.8	32	.6	2.0	7.5	6.5	<.10	8.6	67
JAN 31...	0	7.1	2.9	8.9	37	.7	2.1	7.9	9.6	.20	11	71
MAY 29...	2	6.7	2.8	7.9	36	.7	2.1	8.6	7.2	<.10	5.6	64
SEP 03...	0	7.8	3.2	9.5	37	.7	2.0	8.4	10	<.10	8.9	74

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV 08...	60	.09	2320	.14	<.010	--	.20	.020	<.010	.020	.06
JAN 31...	68	.10	2590	.21	.030	.04	<.10	<.010	--	<.010	--
MAY 29...	57	.09	1050	<.10	.030	.04	.40	<.010	<.010	<.010	--
SEP 03...	77	.10	3480	<.10	.060	.08	.20	.040	.050	<.010	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

02080500 ROANOKE RIVER AT ROANOKE RAPIDS, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV 08...	40	<1	24	<.5	<1	1	<3	6	10	<1	<4
JAN 31...	20	<1	24	<.5	<1	<1	<3	1	53	4	<4
MAY 29...	10	<1	24	<.5	<1	5	<3	1	21	3	<4
SEP 03...	30	<1	22	<.5	<1	<1	<3	3	40	1	<4

DATE	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDIMENT, SUS-PENDED (MG/L)	SEDIMENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 08...	8	<.1	<10	<1	<1	<1	52	<6	20	5	173	92
JAN 31...	7	.2	<10	5	<1	<1	50	<6	5	30	1090	19
MAY 29...	2	<.1	<10	3	<1	<1	49	<6	9	4	66	93
SEP 03...	8	<.1	<10	2	<1	<1	55	<6	7	7	329	62

02080500 ROANOKE RIVER AT ROANOKE RAPIDS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/31	1200	WATER	0	2.78	1800	90	7.30	20.0		7.2	40
84/11/09	1215	WATER	0	6.47	11100	65	7.40	11.0	6.0	9.0	210
84/12/13	1050	WATER	0	2.15	1080	70	7.90	7.0		11.0	10
85/01/31	1025	WATER	0	6.90	12600	61		4.0		12.1	10K
85/02/06	1100	WATER	0	7.20	13700	65		4.0	3.3	12.2	30
85/03/29	1000	WATER	0	2.39	1330	75	7.50	14.0		12.0	10K
85/04/04	1030	WATER	0	3.28	2580	80	7.70	12.0		11.0	10
85/04/12	1000	WATER	0	3.23	2500	78	7.50	15.0		10.6	10K
85/04/17	1047	WATER	0	3.30	2620	75	7.20	15.0		10.5	270
85/04/25	1000	WATER	0	2.96	2060	90	7.30	22.0		8.7	10K
85/05/03	1030	WATER	0	5.72	8600	80	7.10	19.0		7.9	10K
85/05/09	1144	WATER	0	4.84	6070	85	7.30	20.0	5.6	8.1	10
85/05/15	0930	WATER	0	3.10	2280	89	7.00	21.0	2.4	6.2	40
85/05/24	0918	WATER	0	2.98	2090	85	7.00	21.0	4.2	7.4	20
85/05/29	1050	WATER	0	4.86	6120	90	7.10	22.0	3.0	10.0	20
85/06/06	1120	WATER	0	4.80	6060	91	7.10	21.0		9.8	20
85/06/14	1045	WATER	0	2.97	2080	91	7.20	23.0		8.4	10K
85/06/21	1015	WATER	0	2.98	2090	99	7.10	25.0		8.2	10K
85/07/09	1119	WATER	0	5.66	8420	100	7.20	26.0		8.0	160
85/08/29	1115	WATER	0.1	8.46	19100	112	7.20	25.0	2.9	7.0	7100
85/09/30	1130	WATER	0.1	2.97	2080	100	7.20	21.0		8.6	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/31	1200	WATER	0	36	14	110					
84/11/09	1215	WATER	0	40	24	96	.21	.020	.400	.050	.010K
84/12/13	1050	WATER	0	35	3	73					
85/01/31	1025	WATER	0		5	86					
85/02/06	1100	WATER	0		5	80	.22	.010	.200	.030	.010K
85/03/29	1000	WATER	0	40	4	91					
85/04/04	1030	WATER	0	36	12	88					
85/04/12	1000	WATER	0	36	10	74					
85/04/17	1047	WATER	0	33	9	97					
85/04/25	1000	WATER	0	87	8	58					
85/05/03	1030	WATER	0	92	7	74					
85/05/09	1144	WATER	0	215	9	120	.06	.040	.200	.030	.010K
85/05/15	0930	WATER	0	30	1	75	.08	.100	.400	.030	.010K
85/05/24	0918	WATER	0	28	4	110	.05	.060	.400	.020K	.010K
85/05/29	1050	WATER	0	18	4	71	.07	.060	.400	.020	.010K
85/06/06	1120	WATER	0	20	12	77					
85/06/14	1045	WATER	0	27	9	81					
85/06/21	1015	WATER	0	28	5	79					
85/07/09	1119	WATER	0	28	13	110					
85/08/29	1115	WATER	0.1	38	8	70	.03	.060	.300	.020	.010K
85/09/30	1130	WATER	0.1	36	4	110					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/09	1215	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/06	1100	WATER	0	10K	20K	50K	40	100K	.2K	100K	20K
85/05/09	1144	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/15	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/24	0918	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/29	1050	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/29	1115	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PAMLICO RIVER BASIN

02081500 TAR RIVER NEAR TAR RIVER, NC

LOCATION.--Lat 36°11'41", long 78°35'00", Granville County, Hydrologic Unit 03020101, on right bank 90 ft upstream from bridge on State Highway 96, 1.2 mi upstream from Fishing Creek, 2.5 mi east of town of Tar River, and 8 mi south of Oxford.

DRAINAGE AREA.--167 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 972: 1940-41. WSP 1112: 1941 (calendar year figures). WSP 1273: 1941(M). WSP 1723: Drainage area.

GAGE.--Water-stage recorder and concrete control with a sharp-crested weir notch. Datum of gage is 287.25 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional intermittent diversion for irrigation.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 157 ft^3/s, 12.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft^3/s Apr. 27, 1978, gage height, 18.87 ft; no flow for part of Aug. 14, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 4	0930	*3,230	*9.06	Feb. 2	1830	3,150	8.95

Minimum discharge, 0.70 ft^3/s Sept. 21, 22, gage height, 1.19 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	8.9	29	20	2210	151	62	22	13	14	13	23
2	100	7.9	22	22	2740	124	56	20	12	14	9.2	21
3	40	7.3	299	878	1450	109	52	69	11	10	6.4	15
4	22	7.0	209	2860	397	97	48	124	9.7	7.2	4.9	11
5	15	6.5	111	2160	271	93	46	59	8.9	5.6	3.7	8.1
6	10	6.6	990	484	572	86	44	39	7.7	4.9	2.8	6.2
7	7.9	5.9	327	231	540	79	42	31	7.8	16	2.4	5.1
8	6.4	5.4	124	152	275	73	39	25	7.5	10	2.1	4.2
9	5.9	5.3	85	114	174	73	37	22	7.0	6.7	1.7	3.4
10	5.7	5.2	67	94	132	69	35	21	6.1	5.0	1.8	3.0
11	4.7	6.3	56	86	117	66	36	20	6.0	9.8	1.6	2.5
12	3.7	7.4	48	80	913	65	36	21	6.8	11	1.4	2.4
13	3.1	9.5	43	73	864	61	36	22	12	6.2	1.4	2.0
14	3.1	8.3	38	67	302	57	36	20	10	4.1	1.3	1.8
15	3.0	7.5	34	64	191	59	37	18	6.7	2.9	1.2	1.5
16	4.1	6.7	31	55	141	53	39	17	4.9	2.4	.95	1.4
17	4.2	6.3	30	55	118	51	40	21	5.0	1.8	.87	1.3
18	3.6	6.0	29	66	106	50	37	20	14	1.7	199	1.3
19	3.5	6.5	29	68	96	47	36	18	11	1.4	315	1.1
20	4.7	8.5	28	63	91	44	34	17	7.6	1.3	85	.90
21	5.0	14	27	48	84	44	32	15	5.6	1.2	265	.74
22	5.8	15	27	44	79	49	29	16	4.3	1.0	144	1.2
23	7.7	13	27	42	77	81	27	134	3.5	.99	60	1.9
24	37	11	26	43	76	116	25	77	3.1	.84	33	2.4
25	21	9.7	24	47	75	256	24	47	2.6	1.1	26	2.6
26	14	9.2	23	47	624	182	23	38	2.4	1.6	21	2.4
27	9.4	8.9	21	42	565	117	22	30	1.9	2.0	27	2.9
28	7.4	9.1	20	43	243	98	21	24	e2.0	54	27	3.8
29	6.8	18	21	50	---	87	22	20	1.7	57	23	4.3
30	6.6	36	20	57	---	78	22	17	1.6	29	17	5.0
31	9.8	---	20	157	---	70	---	15	---	20	16	---
TOTAL	517.1	282.9	2885	8312	13523	2685	1075	1059	203.4	304.73	1314.72	143.44
MEAN	16.7	9.43	93.1	268	483	86.6	35.8	34.2	6.78	9.83	42.4	4.78
MAX	136	36	990	2860	2740	256	62	134	14	57	315	23
MIN	3.0	5.2	20	20	75	44	21	15	1.6	.84	.87	.74
CFSM	.10	.06	.56	1.60	2.89	.52	.21	.20	.04	.06	.25	.03
IN.	.12	.06	.64	1.85	3.01	.60	.24	.24	.05	.07	.29	.03

CAL YR 1984	TOTAL	80871.9	MEAN	221	MAX	6170	MIN	1.5	CFSM	1.32	IN. 18.01
WTR YR 1985	TOTAL	32305.29	MEAN	88.5	MAX	2860	MIN	.74	CFSM	.53	IN. 7.20

e Estimated

PAMLICO RIVER BASIN

02081500 TAR RIVER NEAR TAR RIVER, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/26	0845	WATER	0	1.66	16	73	6.70	21.0		5.7	40
84/11/13	0815	WATER	0	1.55	12	62	7.20	8.0	7.0	8.7	30
84/12/10	0850	WATER	0	2.51	70	40	7.80	3.0		12.0	210
85/01/22	0830	WATER	0	2.22	44	49		.0		12.8	20
85/02/12	0900	WATER	0	3.75	430	37	6.90	5.0	90.0	12.0	490
85/03/19	0800	WATER	0	2.23	47	50	7.00	8.0		10.4	90
85/04/11	0745	WATER	0	2.00	36	70	7.00	12.0		9.8	30
85/05/16	0830	WATER	0	1.64	14	81	7.00	22.0	9.5	5.5	110
85/06/20	0730	WATER	0	1.47	8	85	6.90	22.0		5.7	40
85/07/17	0830	WATER	0	1.28	1	85	6.80	24.0		4.5	90
85/08/26	0845	WATER	0.1	1.76	21	60	6.90	22.0	40.0	6.7	410
85/09/20	0840	WATER	0.1	1.21	.6	59	7.10	17.0		8.8	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/26	0845	WATER	0	43	4	120					
84/11/13	0815	WATER	0	46	2	84	.01K	.010	.300	.040	.010K
84/12/10	0850	WATER	0	24	9	99					
85/01/22	0830	WATER	0		6	86					
85/02/12	0900	WATER	0	25	91	210	.21	.030	.500	.140	.020
85/03/19	0800	WATER	0	26	1	100					
85/04/11	0745	WATER	0	38	5	100					
85/05/16	0830	WATER	0	35	7	93	.17	.090	.400	.040	.010K
85/06/20	0730	WATER	0	35	10	110					
85/07/17	0830	WATER	0	37	5	98					
85/08/26	0845	WATER	0.1	17	21	130	.33	.600	.600	.080	.010
85/09/20	0840	WATER	0.1	26	2	75					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/13	0815	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/12	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/16	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/26	0845	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02081747 TAR RIVER AT U.S. 401 AT LOUISBURG, NC

LOCATION.--Lat 36°05'34", long 78°17'48", Franklin County, Hydrologic Unit 03020101, on left bank 0.1 mi downstream from bridge on U.S. Highway 401 (Bickett Boulevard), at Louisburg, and 0.2 mi upstream from Fox Creek.

DRAINAGE AREA.--427 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. Published as Tar River at Louisburg, NC (02081740) October 1963 to September 1973. Prior to October 1972, medium and high water discharges only.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 176.71 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 21, 1973, nonrecording gage at bridge 0.4 mi upstream at datum 1.82 ft higher; Nov. 22, 1973 to June 24, 1980 at site 0.1 mi upstream at same datum.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--12 years, 451 ft^3/s, 14.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft^3/s Apr. 28, 1978, gage height, 24.36 ft from floodmarks; minimum gage height observed, 1.30 ft several days in September 1967, August, September and October 1968 at site and datum, 0.4 mi upstream. Minimum discharge, 7.3 ft^3/s Aug. 14, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of December 1934, September 1945 and August 1955 reached stages of 26 ft, 24 ft, and 24 ft, respectively, at site and datum 0.4 mi upstream, from information of U. S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 6	0230	4,830	17.98	Feb. 3	0930	*5,380	*18.79

Minimum discharge, 7.5 ft^3/s Sept. 20; minimum gage height, 3.45 ft, Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	102	146	106	2110	574	209	93	72	105	158	52
2	461	91	129	110	4430	471	193	90	68	129	185	49
3	218	82	419	572	5320	411	179	240	62	99	108	48
4	125	75	829	2670	4350	361	172	371	57	67	75	42
5	95	82	442	4320	1420	339	166	227	55	50	60	34
6	80	83	1010	4540	1150	314	169	148	51	43	53	30
7	70	78	1470	1710	1690	280	159	121	50	47	48	26
8	66	71	528	618	1110	263	150	106	55	45	43	22
9	64	69	326	470	708	260	144	97	52	43	41	20
10	62	70	251	378	564	252	139	94	47	41	42	18
11	60	80	215	338	490	237	139	93	44	298	38	17
12	59	104	192	308	1100	234	141	105	50	189	34	14
13	57	101	173	273	2500	222	142	142	79	84	31	13
14	54	84	161	253	1620	212	146	199	86	71	28	12
15	53	77	150	239	753	205	151	127	58	90	24	11
16	53	77	142	213	594	195	153	102	56	53	24	9.7
17	55	75	138	225	503	194	161	102	99	61	26	9.5
18	62	72	134	259	442	190	158	106	138	57	85	9.2
19	67	80	133	254	402	179	142	92	133	44	454	8.9
20	70	106	132	233	379	175	133	80	81	36	318	8.2
21	70	121	129	170	349	172	126	73	55	30	152	9.0
22	80	100	131	200	325	205	118	80	44	52	334	10
23	83	95	129	199	310	262	111	492	39	94	178	15
24	84	92	123	188	302	310	107	408	36	48	111	17
25	103	88	118	195	296	526	105	232	33	113	91	16
26	101	84	111	191	617	572	101	153	30	237	124	28
27	89	83	108	175	1610	393	97	123	26	153	113	83
28	82	101	108	195	882	310	98	104	24	522	82	61
29	87	167	108	204	---	273	102	91	25	529	80	42
30	92	178	108	212	---	249	99	83	70	206	70	27
31	103	---	107	287	---	226	---	76	---	144	59	---
TOTAL	3012	2768	8400	20305	36326	9066	4210	4650	1775	3780	3269	761.5
MEAN	97.2	92.3	271	655	1297	292	140	150	59.2	122	105	25.4
MAX	461	178	1470	4540	5320	574	209	492	138	529	454	83
MIN	53	69	107	106	296	172	97	73	24	30	24	8.2
CFSM	.23	.22	.63	1.53	3.04	.68	.33	.35	.14	.29	.25	.06
IN.	.26	.24	.73	1.77	3.16	.79	.37	.41	.15	.33	.28	.07

CAL YR 1984 TOTAL 235225 MEAN 643 MAX 6260 MIN 40 CFSM 1.51 IN. 20.49
WTR YR 1985 TOTAL 98322.5 MEAN 269 MAX 5320 MIN 8.2 CFSM .63 IN. 8.57

02081747 TAR RIVER AT U.S. 401 AT LOUISBURG, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/19	0900	WATER	0	4.39	66	72	6.40	19.0		8.0	250
84/11/15	0830	WATER	0	4.49	79	60	7.20	7.0	8.7	10.8	90
84/12/13	0800	WATER	0	5.25	179	50	7.90	6.0		9.6	170
85/01/14	0730	WATER	0	5.73	257	41		3.0		12.0	60
85/02/21	0830	WATER	0	6.23	355	40	7.10	4.0	22.0	11.5	30
85/03/06	0800	WATER	0	6.05	320	55	7.00	12.0		9.6	40
85/04/16	0800	WATER	0	5.06	152	75	6.90	17.0		8.6	290
85/05/13	0800	WATER	0	4.93	136	80	6.90	20.0	13.0	7.7	560
85/06/18	0800	WATER	0	4.95	140	82	6.90	23.0		7.0	1700
85/07/16	0800	WATER	0	4.04	55	75	6.90	25.0		6.2	220
85/08/28	0845	WATER	0.1	4.37	84	70	7.00	23.0	38.0	7.5	190
85/09/10	0820	WATER	0.1	3.67	19	91	7.00	25.0		6.6	330

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/19	0900	WATER	0	38	14	130					
84/11/15	0830	WATER	0	42	5	130	.21	.020	.300	.070	.010
84/12/13	0800	WATER	0	29	9	94					
85/01/14	0730	WATER	0		4	95					
85/02/21	0830	WATER	0	131	11	97	.33	.030	.300	.050	.010
85/03/06	0800	WATER	0	50	14	98					
85/04/16	0800	WATER	0	43	13	100					
85/05/13	0800	WATER	0	268	21	120	.30	.090	.300	.100	.010
85/06/18	0800	WATER	0	30	46	150					
85/07/16	0800	WATER	0	26	29	130					
85/08/28	0845	WATER	0.1	30	29	100	.24	.060	.400	.080	.010
85/09/10	0820	WATER	0.1	38	19	130					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/15	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	0800	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/28	0845	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PAMLICO RIVER BASIN

02082506 TAR RIVER BELOW TAR RIVER RESERVOIR NEAR ROCKY MOUNT, NC

LOCATION.--Lat 35°53'58", long 77°51'57", Nash County, Hydrologic Unit 03020101, near center of span on downstream side of bridge on Secondary Road 1544, 1.8 mi downstream from Tar River Reservoir, 2.8 mi downstream from Sapony Creek, 2.9 mi upstream from Grape Branch, and 5.0 mi southwest of Rocky Mount.

DRAINAGE AREA.--777 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 85.9 ft above National Geodetic Vertical Datum of 1929 (levels by North Carolina State Highway Commission).

REMARKS.--Records good except those for estimated daily discharges, which are fair. The city of Rocky Mount diverted an average of 12.8 ft^3/s for municipal water supply, most of which was returned as sewage below station. National Weather Service gage height telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--13 years, 844 ft^3/s, 14.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s Apr. 30, 1978, gage height, 21.62 ft; minimum, 35 ft^3/s Oct. 19, 20, 1981, gage height, 3.17 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,260 ft^3/s Feb. 6, gage height, 15.07 ft; minimum, 83 ft^3/s Sept. 28, gage height, 3.43 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	135	146	228	1340	1560	519	206	148	108	783	159
2	146	135	149	188	3490	1090	466	133	134	109	2290	148
3	435	135	158	200	4890	872	444	132	126	173	1810	137
4	619	138	153	1260	5490	785	404	199	120	233	1220	130
5	731	135	585	2940	5970	717	396	532	118	192	654	126
6	523	136	911	3740	5640	648	393	510	149	151	372	123
7	239	138	1350	4300	2640	607	366	370	132	134	253	122
8	198	139	1770	3750	2430	564	359	288	121	122	212	122
9	491	139	965	1350	1880	526	342	247	111	117	190	121
10	264	140	608	823	1310	517	324	228	109	113	174	119
11	147	139	468	681	1040	504	322	223	109	115	163	118
12	132	139	404	593	1770	497	320	218	110	135	225	119
13	128	141	358	547	2780	466	335	234	106	224	806	119
14	128	142	326	494	3440	452	355	287	105	189	275	121
15	129	142	305	453	2790	436	396	325	104	154	184	122
16	129	140	292	419	1610	411	409	304	107	218	146	121
17	130	141	279	422	1190	404	578	252	106	263	100	119
18	131	143	266	466	976	397	520	223	115	185	113	118
19	130	140	269	523	860	352	441	206	166	148	116	118
20	131	143	260	514	804	346	393	194	200	134	304	117
21	131	145	261	465	767	338	360	175	187	125	597	118
22	131	145	269	374	724	434	335	168	149	123	416	119
23	131	146	254	258	677	688	306	172	123	123	435	119
24	132	146	258	218	661	764	290	442	110	124	380	117
25	133	147	250	311	626	950	277	e500	106	132	288	113
26	134	147	238	355	672	1200	263	e400	106	558	402	115
27	135	148	232	338	1210	1180	258	e300	107	1030	438	106
28	133	149	227	342	2080	891	248	e250	107	1010	346	84
29	134	142	230	388	---	709	245	184	108	2590	247	84
30	134	120	222	413	---	617	237	172	107	1970	206	84
31	134	---	221	566	---	561	---	162	---	1350	175	---
TOTAL	6568	4215	12684	27919	59757	20483	10901	8236	3706	12352	14320	3558
MEAN	212	141	409	901	2134	661	363	266	124	398	462	119
MAX	731	149	1770	4300	5970	1560	578	532	200	2590	2290	159
MIN	128	120	146	188	626	338	237	132	104	108	100	84
CFSM	.27	.18	.53	1.16	2.75	.85	.47	.34	.16	.51	.59	.15
IN.	.31	.20	.61	1.34	2.86	.98	.52	.39	.18	.59	.69	.17

CAL YR 1984 TOTAL 431237 MEAN 1178 MAX 8180 MIN 115 CFSM 1.52 IN. 20.65
WTR YR 1985 TOTAL 184699 MEAN 506 MAX 5970 MIN 84 CFSM .65 IN. 8.84

e Estimated

02082506 TAR RIVER BELOW TAR RIVER RESERVOIR NEAR ROCKY MOUNT, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/16	0915	WATER	0	3.71	97	68	7.60	19.0		9.1	20
84/11/16	0915	WATER	0	3.76	141	65	7.20	13.0	5.5	11.0	10K
84/12/04	0830	WATER	0	3.86	153	53		9.0		10.8	30
85/01/14	1130	WATER	0	5.00	496	40		4.0		12.0	60
85/02/21	1330	WATER	0	5.66	761	40	7.30	7.0	50.0	12.2	10
85/03/06	1150	WATER	0	5.38	647	50	6.90	12.0		10.6	30
85/04/16	1225	WATER	0	4.75	404	70	7.30	18.0		9.3	10
85/05/13	1300	WATER	0	4.23	233	68	7.20	21.0	2.4	7.2	60
85/06/18	1200	WATER	0	3.79	110	70	6.90	23.0		6.0	10
85/07/16	1140	WATER	0	4.08	190	80	6.80	26.0		5.2	10K
85/08/28	1400	WATER	0.1	4.46	333	70	7.10	24.0	6.8	8.2	50
85/09/10	1315	WATER	0.1	3.64	119	70	6.90	24.0		5.8	30

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/16	0915	WATER	0	32	8	88					
84/11/16	0915	WATER	0	39	3	110	.19	.080	.300	.060	.010
84/12/04	0830	WATER	0	44	7	71					
85/01/14	1130	WATER	0		15	110					
85/02/21	1330	WATER	0	98	15	110	.40	.080	.400	.090	.020
85/03/06	1150	WATER	0	25	7	110					
85/04/16	1225	WATER	0	33	5	89					
85/05/13	1300	WATER	0	215	2	83	.14	.120	.300	.040	.010
85/06/18	1200	WATER	0	25	9	82					
85/07/16	1140	WATER	0	26	7	76					
85/08/28	1400	WATER	0.1	24	10	82	.05	.070	.600	.070	.010
85/09/10	1315	WATER	0.1	23	2	89					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	CCPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/16	0915	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	1330	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	1300	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/28	1400	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PAMLICO RIVER BASIN

02082585 TAR RIVER AT NC 97 AT ROCKY MOUNT, NC

LOCATION.--Lat 35°57'15", long 77°47'15", Edgecombe County, Hydrologic Unit 03020101, on left bank 20 ft downstream from bridge on NC Highway 97, 0.5 mi upstream from Cowlick Branch, and 1.0 mi north-northeast of Rocky Mount.

DRAINAGE AREA.--925 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1976 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 53.88 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except those below 10 ft^3/s which are fair. Some regulation at low flow by mill above station. The city of Rocky Mount diverted an average of 16.0 ft^3/s for municipal water supply, most of which was returned as sewage below station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--9 years, 945 ft^3/s, 13.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft^3/s May 1, 1978, gage height, 23.66 ft; minimum, 6.1 ft^3/s Oct. 2, 1983, gage height, 2.84 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,870 ft^3/s Feb. 6, gage height, 16.88 ft; minimum, 29 ft^3/s Oct. 17, Aug. 16, gage height, 3.07 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	148	199	286	1470	1690	634	240	167	218	1200	189
2	195	148	189	272	3790	1200	591	86	152	145	3560	177
3	328	148	405	387	5580	1000	551	216	218	144	2370	89
4	714	163	304	1280	6330	896	474	184	85	195	1480	184
5	593	166	643	3060	6660	829	486	490	160	234	740	65
6	668	167	1050	3910	6680	772	494	574	306	184	449	118
7	284	171	1290	4420	3710	670	456	407	209	174	326	165
8	234	166	1790	4280	2800	663	449	330	89	143	272	60
9	438	161	1080	1610	2160	630	425	288	124	135	244	111
10	352	159	672	913	1460	620	417	217	213	198	216	106
11	180	158	536	772	1170	605	355	299	85	254	113	101
12	158	157	470	686	2140	636	424	226	124	130	175	103
13	154	157	426	641	3230	534	419	285	150	260	806	102
14	154	160	394	586	4020	561	423	336	138	229	334	106
15	150	159	375	539	3600	545	429	347	135	256	206	108
16	274	156	357	500	1920	535	475	371	290	167	96	105
17	31	155	342	529	1340	468	616	330	323	345	108	106
18	110	157	336	574	1120	498	638	234	116	243	329	109
19	148	158	336	638	1010	471	507	299	311	168	551	109
20	151	158	335	621	948	441	459	255	336	92	291	108
21	149	159	269	553	908	441	427	218	308	137	632	110
22	148	161	330	447	857	570	400	232	263	129	477	127
23	150	163	314	352	804	866	331	152	102	124	431	116
24	149	164	317	282	782	995	342	322	232	146	425	114
25	148	165	310	411	767	1140	315	553	78	406	335	107
26	149	166	296	447	881	1340	294	474	213	661	587	132
27	149	166	295	432	1200	1360	259	381	84	1240	514	284
28	150	211	281	430	2120	1060	233	315	153	1290	421	37
29	148	211	287	477	---	861	332	255	102	2870	313	80
30	148	183	280	509	---	723	243	219	322	2410	243	79
31	148	---	285	794	---	675	---	136	---	1520	202	---
TOTAL	7161	4921	14793	31638	69457	24295	12898	9271	5588	14847	18446	3507
MEAN	231	164	477	1021	2481	784	430	299	186	479	595	117
MAX	714	211	1790	4420	6680	1690	638	574	336	2870	3560	284
MIN	31	148	189	272	767	441	233	86	78	92	96	37
CFSM	.25	.18	.52	1.10	2.68	.85	.46	.32	.20	.52	.64	.13
IN.	.29	.20	.59	1.27	2.79	.98	.52	.37	.22	.60	.74	.14

CAL YR 1984 TOTAL 506241 MEAN 1383 MAX 9630 MIN 31 CFSM 1.50 IN. 20.36
WTR YR 1985 TOTAL 216822 MEAN 594 MAX 6680 MIN 31 CFSM .64 IN. 8.72

02082585 TAR RIVER AT NC 97 AT ROCKY MOUNT, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/16	0950	WATER	0	6.67	1320	68	7.40	19.0		9.3	450
84/11/16	1000	WATER	0	3.59	157	70	7.20	14.0	4.6	11.6	10
84/12/04	0910	WATER	0	4.06	299	53	7.50	10.0		11.0	290
85/01/14	1000	WATER	0	5.35	774	40		4.0		12.2	90
85/02/21	1140	WATER	0	5.68	907	41	7.10	6.0	38.0	12.5	50
85/03/06	1010	WATER	0	5.34	770	51	6.90	12.0		10.5	10
85/04/16	1100	WATER	0	4.21	351	70	7.10	17.0		9.5	30
85/05/13	1115	WATER	0	4.45	409	79	7.10	21.0	2.4	6.4	60
85/06/18	1045	WATER	0	3.29	79	70	6.60	24.0		5.4	30
85/07/16	1020	WATER	0	3.18	52	82	6.90	26.0		6.0	120
85/08/28	1220	WATER	0.1	4.38	412	71	7.00	25.0	7.8	7.4	110
85/09/10	1055	WATER	0.1	3.38	101	70	7.00	25.0		7.3	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/16	0950	WATER	0	27	63	170					
84/11/16	1000	WATER	0	41	1K	91	.24	.040	.300	.070	.020
84/12/04	0910	WATER	0	42	13	91					
85/01/14	1000	WATER	0		17	110					
85/02/21	1140	WATER	0	95	13	98	.51	.130	.400	.100	.010
85/03/06	1010	WATER	0	25	4	120					
85/04/16	1100	WATER	0	33	5	87					
85/05/13	1115	WATER	0	220	2	82	.25	.080	.400	.070	.020
85/06/18	1045	WATER	0	17	9	98					
85/07/16	1020	WATER	0	25	5	80					
85/08/28	1220	WATER	0.1	21	8	81	.14	.040	.600	.140	.010K
85/09/10	1055	WATER	0.1	20	1	96					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/16	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	1140	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	1115	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/28	1220	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PAMLICO RIVER BASIN

0208273070 DEVILS CRADLE CREEK AT NC 39 NEAR KEARNEY, NC

LOCATION.--LAT 36°12'47", long 78°17'49", Franklin County, Hydrologic Unit 03020101, on left bank 4 ft downstream from culvert on State Highway 39, and 1.6 mi southwest of Kearney.

DRAINAGE AREA.--2.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1984 to April 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 335 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR CURRENT PERIOD.-- February 1984 to April 1985: Maximum discharge, 221 ft^3/s May 29, 1984, gage height, 5.26 ft; minimum, 0.08 ft^3/s June 27, 1984, gage height, 1.08 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, FEBRUARY TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					e3.7	4.4	4.9	3.9	9.9	2.5	3.5	1.6
2					e4.4	3.7	4.5	3.7	6.2	14	3.1	1.5
3					e5.8	3.6	4.2	3.9	4.9	16	2.7	1.4
4					e8.8	3.5	6.1	3.7	4.0	4.4	2.3	1.5
5					e5.4	9.8	22	3.2	3.9	3.8	2.0	1.5
6					e6.4	28	7.3	14	3.7	14	1.8	1.3
7					e5.3	15	5.3	9.7	3.3	8.5	1.7	1.3
8					e4.2	7.9	4.6	7.9	2.8	6.3	1.6	1.3
9					e4.1	6.2	4.7	7.5	2.5	4.0	1.5	1.2
10					e5.0	5.0	6.5	5.7	2.2	3.2	11	1.4
11					5.4	4.5	5.5	5.2	2.1	2.9	8.7	1.6
12					5.3	4.1	4.8	4.6	1.9	2.5	5.1	1.8
13					4.9	8.6	4.5	4.3	1.8	3.6	4.0	1.7
14					47	7.4	27	4.0	1.6	2.9	3.7	2.7
15					17	5.3	32	3.6	1.7	2.6	3.1	1.8
16					9.5	4.7	12	3.4	1.6	2.3	2.7	1.5
17					7.3	4.3	7.6	3.1	1.7	2.4	2.4	1.5
18					5.8	4.1	5.9	3.1	1.6	6.6	2.3	1.5
19					5.2	6.5	5.2	3.1	1.6	4.3	2.4	1.6
20					5.0	5.3	5.1	2.9	1.5	3.3	2.2	1.5
21					4.6	8.9	4.7	2.8	1.4	3.2	2.1	1.4
22					4.3	5.8	4.9	2.7	1.4	3.4	1.9	1.4
23					15	4.7	27	2.8	1.4	3.1	1.9	1.4
24					13	4.4	10	3.0	1.4	2.6	2.0	1.4
25					6.2	4.9	6.5	2.6	1.5	2.4	1.6	1.4
26					4.6	5.5	5.3	2.5	1.3	2.1	1.7	1.4
27					13	4.7	4.8	31	.81	2.3	1.6	1.3
28					16	9.8	4.6	39	2.2	6.1	1.6	1.4
29					7.2	31	4.3	118	3.4	4.7	3.4	1.4
30					---	8.6	4.1	85	2.4	4.0	2.2	1.3
31					---	5.7	---	18	---	3.6	1.9	---
TOTAL					249.4	235.9	255.9	407.9	77.71	147.6	89.7	45.0
MEAN					8.60	7.61	8.53	13.2	2.59	4.76	2.89	1.50
MAX					47	31	32	118	9.9	16	11	2.7
MIN					3.7	3.5	4.1	2.5	.81	2.1	1.5	1.2

e Estimated

02084273070 DEVILS CRADLE CREEK AT NC 39 NEAR KEARNEY, NC--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1984 TO APRIL 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	1.3	1.5	1.3	35	4.3	2.1					
2	1.6	1.3	1.6	2.4	35	4.2	2.0					
3	1.3	1.2	6.4	17	11	3.8	1.9					
4	1.1	1.3	2.7	18	7.4	3.4	1.9					
5	1.1	1.4	4.4	8.3	7.0	3.5	1.8					
6	1.1	1.3	5.0	4.8	13	3.1	2.0					
7	1.1	1.2	2.8	3.8	8.3	3.0	1.8					
8	1.1	1.3	2.4	3.3	6.2	3.0	1.7					
9	1.2	1.3	2.1	2.9	5.5	2.9	1.8					
10	1.1	1.3	2.0	2.8	5.2	2.8	1.8					
11	1.1	1.6	1.9	2.8	5.2	2.8	1.8					
12	1.2	1.3	1.8	2.6	23	2.8	1.7					
13	1.1	1.2	1.7	2.4	9.7	2.5	1.7					
14	1.0	1.2	1.7	2.4	6.8	2.5	1.9					
15	1.0	1.2	1.6	2.3	5.9	2.4	1.9					
16	1.1	1.3	1.6	2.2	5.3	2.3	1.7					
17	1.1	1.2	1.6	2.9	5.1	2.3	2.0					
18	1.4	1.2	1.6	2.9	4.8	2.1	1.6					
19	1.3	1.7	1.6	e2.7	4.6	2.1	1.4					
20	1.3	1.4	1.5	e2.5	4.5	2.1	1.4					
21	1.3	1.3	1.5	e2.5	4.1	2.1	1.4					
22	1.4	1.3	1.6	e2.4	4.1	2.9	1.4					
23	1.4	1.4	1.5	e2.3	4.0	3.1	1.3					
24	1.4	1.3	1.5	e2.2	4.0	3.6	1.3					
25	1.2	1.3	1.4	2.2	3.9	4.0	1.6					
26	1.3	1.3	1.3	2.1	7.2	3.0	1.3					
27	1.2	1.3	1.4	2.1	5.5	2.7	1.3					
28	1.3	2.4	1.4	2.5	4.6	2.5	1.3					
29	1.6	2.0	1.4	2.8	---	2.3	1.2					
30	1.6	1.6	1.3	2.8	---	2.3	1.2					
31	1.7	---	1.3	5.0	---	2.2	---					
TOTAL	41.4	41.4	63.1	119.2	245.9	88.6	49.2					
MEAN	1.34	1.38	2.04	3.85	8.78	2.86	1.64					
MAX	3.7	2.4	6.4	18	35	4.3	2.1					
MIN	1.0	1.2	1.3	1.3	3.9	2.1	1.2					

e Estimated

02082730 70 DEVILS CRADLE CREEK AT NC 49 NEAR KEARNEY, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1984 to April 1985 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1984 to April 1985.
WATER TEMPERATURE: February 1984 to April 1985.

INSTRUMENTATION.--Water-quality monitor from February 1984 to April 1985.

REMARKS.--Station operated as part of a study of effects of land-use on the biological habitat of Piedmont streams. Interruptions in the daily record were due to malfunctions of the monitor.

EXTREMES FOR CURRENT PERIOD.--February 1984 to April 1985:
SPECIFIC CONDUCTANCE: Maximum, 138 microsiemens June 19, 1984; minimum, 39 microsiemens Feb. 27, 1984.
WATER TEMPERATURE: Maximum, 25.5°C July 7, Aug. 3, 4, 1984; minimum, 0.0°C Jan. 20, 21, 1985.

WATER QUALITY DATA, FEBRUARY 1984 TO APRIL 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAR , 1984												
28...	1115	9.7	59	6.3	12.0	9.2	89	3.6	32	.50	.39	.050
29...	1100	30	64	6.3	11.0	9.2	88	4.2	54	.60	.48	.810
APR												
23...	1100	26	71	6.0	9.5	9.2	82	4.1	54	.60	.62	1.40
MAY												
21...	0940	2.2	70	5.9	19.0	8.8	97	5.3	68	.70	.66	.030
29...	1045	205	50	5.6	21.0	6.2	71	2.8	55	.60	.45	1.10
JUL												
17...	1230	2.2	78	6.8	22.5	8.7	102	4.9	54	.60	.57	.020
AUG												
14...	1030	3.7	68	6.3	23.0	7.1	84	4.6	56	.50	.48	.050
SEP												
26...	1035	1.5	75	6.7	18.5	8.4	91	5.1	28	.80	.73	.030
OCT												
29...	1010	1.9	75	6.3	20.0	7.5	83	6.7	62	.40	.35	<.010
NOV												
26...	1240	1.3	70	6.2	9.0	10.7	93	6.2	58	.90	.84	.040
DEC												
12...	1125	1.8	68	5.9	8.0	10.3	88	5.9	50	.70	.77	.110
FEB , 1985												
01...	1120	36	70	5.9	5.0	11.8	94	5.6	66	1.0	.78	1.40

02082730?0 DEVILS CRADLE CREEK AT NC 49 NEAR KEARNEY, NC--Continued

WATER QUALITY DATA, FEBRUARY 1984 TO APRIL 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
MAR , 1984												
28...	<.010	1.8	.80	2.3	.730	<.010	.140	.030	8	<1	9	<10
29...	.670	1.2	.90	1.8	.230	.050	.130	.040	2	<1	3	<10
APR												
23...	1.20	2.5	2.7	3.1	.320	.120	.200	.100	1	1	3	--
MAY												
21...	--	1.2	.80	1.9	.170	.080	.130	.070	1	<1	9	<10
29...	1.10	3.3	3.0	3.9	.700	.250	.420	.200	1	<1	5	<10
JUL												
17...	.020	.90	.90	1.5	.140	.010	.120	<.010	3	3	<1	<10
AUG												
14...	--	.40	.40	.90	.140	.040	.100	.030	1	<1	2	<10
SEP												
26...	.030	.20	--	1.0	.070	.010	.050	<.010	1	1	<1	<10
OCT												
29...	--	1.2	.60	1.6	.130	.060	.090	.020	<1	1	1	<10
NOV												
26...	<.010	2.2	.90	3.1	.080	.020	.050	.030	<1	<1	<1	<10
DEC												
12...	.050	.90	.50	1.6	<.010	<.010	.020	<.010	<1	<1	<1	<10
FEB , 1985												
01...	1.30	1.6	1.0	2.6	.520	.110	.270	.110	1	<1	11	<10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAR , 1984												
28...	18	15	22000	48	40	6	220	23	9	1	70	<3
29...	3	2	2300	160	3	1	80	43	2	2	10	12
APR												
23...	1	1	1800	180	3	2	80	46	1	<1	20	5
MAY												
21...	2	<1	2400	1000	1	<1	40	39	3	2	30	8
29...	6	3	3600	230	9	1	160	53	4	1	30	12
JUL												
17...	5	--	2700	49	4	3	110	86	2	2	20	--
AUG												
14...	5	--	2100	72	5	1	100	90	1	<1	10	12
SEP												
26...	2	2	1300	30	3	--	80	64	1	1	10	--
OCT												
29...	<1	--	2600	240	1	1	90	62	1	1	20	6
NOV												
26...	<1	<1	1300	180	2	2	90	65	<1	<1	10	6
DEC												
12...	11	<1	1100	130	1	<1	90	71	9	<1	20	10
FEB , 1985												
01...	5	1	4000	150	7	2	210	78	2	1	20	14

0208273070 DEVILS CRADLE CREEK AT NC 49 NEAR KEARNEY, NC--Continued

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)
FEB			
23...	0940	9.0	100
MAR			
02...	1230	3.7	11
09...	1200	6.1	15
25...	1000	5.1	12
28...	1115	9.7	226
28...	1400	10	67
29...	0840	37	185
29...	1100	30	107
29...	1400	23	90
30...	1000	9.0	23
APR			
02...	1115	4.6	10
05...	1215	19	60
23...	1100	26	158
MAY			
07...	1200	9.4	41
21...	0940	2.2	11
29...	1210	216	423
29...	1630	169	479
29...	1715	161	255
29...	1800	153	270
30...	1300	79	123
30...	1330	76	224
JUN			
22...	1115	1.5	16
JUL			
17...	1230	2.2	14
AUG			
14...	1030	3.7	12
SEP			
26...	1035	1.5	11

WATER QUALITY DATA, OCTOBER TO APRIL 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)
OCT			
02...	1126	1.7	31
29...	1010	1.9	70
NOV			
26...	1240	1.3	31
DEC			
12...	1325	1.8	6
JAN			
03...	1500	20	558
FEB			
01...	1120	36	366
01...	1200	30	324

PAMLICO RIVER BASIN

02084273070 DEVILS CRADLE CREEK AT NC 49 NEAR KEARNEY, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, FEBRUARY TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	53	51	52	62	60	61	75	64	70
2	---	---	---	57	53	55	62	61	61	73	63	67
3	---	---	---	57	56	57	63	60	62	74	66	71
4	---	---	---	59	57	57	63	51	61	73	69	71
5	---	---	---	71	44	55	---	---	---	74	68	71
6	---	---	---	54	46	51	---	---	---	---	---	---
7	---	---	---	53	50	52	---	---	---	97	91	94
8	---	---	---	55	53	54	77	70	72	110	97	101
9	---	---	---	55	54	55	71	68	69	110	82	95
10	---	---	---	56	55	56	68	61	65	84	81	82
11	69	67	68	57	56	56	61	59	60	87	84	86
12	67	64	66	58	57	57	61	58	59	87	81	84
13	68	64	66	58	44	55	62	60	61	82	77	79
14	66	39	45	60	56	59	62	41	57	78	75	77
15	54	47	51	62	60	61	---	---	---	77	74	76
16	60	55	57	63	61	62	---	---	---	75	72	73
17	66	57	62	63	61	62	---	---	---	72	69	70
18	---	---	---	63	60	62	---	---	---	70	68	69
19	---	---	---	62	52	59	---	---	---	70	67	69
20	---	---	---	62	59	60	---	---	---	72	69	70
21	---	---	---	62	40	56	---	---	---	72	69	70
22	---	---	---	59	57	58	---	---	---	73	71	72
23	---	---	---	61	59	60	---	---	---	74	70	73
24	---	---	---	62	59	61	82	66	75	72	70	71
25	54	53	54	64	61	62	71	60	63	73	71	72
26	56	54	56	63	61	62	62	59	61	74	72	73
27	57	39	51	65	62	63	72	62	68	74	41	61
28	49	43	47	65	54	57	73	71	72	82	64	77
29	51	49	50	64	42	58	73	69	71	94	37	70
30	---	---	---	63	60	61	74	71	73	101	62	87
31	---	---	---	61	60	61	---	---	---	101	74	89
MONTH	69	39	56	71	40	58	82	41	65	110	37	76

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	76	63	67	79	77	78	68	65	66	73	70	72
2	65	63	64	80	39	65	71	68	69	73	70	72
3	67	63	65	60	51	56	68	66	67	74	71	72
4	69	65	67	65	61	63	71	67	69	73	71	73
5	67	65	66	80	66	68	72	69	70	73	70	72
6	69	65	67	74	42	63	72	69	70	73	70	72
7	71	68	69	63	52	58	73	70	71	73	70	71
8	73	68	71	66	62	63	77	72	75	72	69	71
9	74	71	72	69	65	66	81	74	77	72	69	71
10	84	74	79	74	69	71	76	48	66	72	69	71
11	100	84	93	76	72	74	59	51	55	73	69	71
12	104	100	102	77	75	76	63	59	61	72	70	71
13	114	106	109	78	69	72	67	63	65	72	70	71
14	110	107	109	76	74	75	68	67	67	70	65	67
15	112	107	109	78	75	76	69	67	68	73	71	72
16	112	109	111	78	76	77	70	68	69	74	73	74
17	112	104	109	79	77	78	71	69	70	73	72	73
18	136	94	109	78	60	69	70	69	70	73	71	72
19	138	87	102	72	68	69	70	68	70	71	70	71
20	131	84	94	73	71	71	71	69	70	71	70	71
21	124	84	92	73	71	72	71	69	70	74	70	71
22	127	82	88	73	68	71	73	69	71	73	71	72
23	84	82	83	73	71	73	73	68	71	74	72	73
24	84	81	82	75	73	74	71	68	70	74	73	73
25	84	80	82	75	74	75	73	69	71	76	73	74
26	82	80	81	76	74	75	73	69	71	75	70	73
27	91	80	83	75	69	74	73	68	71	---	---	---
28	83	66	78	68	61	64	72	68	70	---	---	---
29	77	68	73	64	63	64	71	61	65	---	---	---
30	80	77	79	65	63	64	70	66	68	---	---	---
31	---	---	---	67	65	66	72	69	70	---	---	---
MONTH	138	63	85	80	39	70	81	48	69	76	65	72
YEAR	138	37	70									

0208273070 DEVILS CRADLE CREEK AT NC 49 NEAR KEARNEY, NC--Continued

TEMPERATURE, WATER (DEG. C), FEBRUARY TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	8.5	5.0	6.5	14.0	9.0	11.0	20.5	14.5	17.0
2	---	---	---	9.0	6.0	7.5	15.0	8.0	11.0	17.0	13.0	15.0
3	---	---	---	9.5	6.0	7.5	14.0	10.0	12.0	18.5	14.5	16.5
4	---	---	---	10.5	5.5	7.5	14.5	11.5	13.0	20.0	16.0	17.5
5	---	---	---	10.5	7.5	9.0	15.5	12.5	14.0	21.0	13.5	17.0
6	---	---	---	10.5	9.0	10.0	14.0	11.0	12.5	18.0	15.0	16.5
7	---	---	---	9.5	7.0	8.5	15.5	10.5	12.5	20.5	17.0	18.5
8	---	---	---	11.0	5.5	8.0	14.5	9.5	12.0	23.0	17.5	19.0
9	---	---	---	9.5	6.0	7.5	12.0	10.5	11.5	18.0	14.5	16.5
10	---	---	---	9.0	4.5	6.5	10.0	8.5	9.5	19.0	12.5	15.5
11	11.5	7.0	9.5	11.0	5.0	7.5	14.5	7.0	10.5	20.0	12.5	16.0
12	13.0	9.0	11.0	11.0	5.5	8.0	15.5	8.5	12.0	20.5	15.0	17.5
13	14.0	10.0	12.0	8.0	6.0	7.0	16.0	10.5	13.5	21.0	15.5	18.5
14	14.0	11.5	13.0	12.0	6.0	9.0	---	---	---	21.0	17.0	19.0
15	13.5	10.5	12.0	13.5	7.5	10.5	17.0	11.5	14.0	19.5	14.0	17.0
16	13.0	9.5	11.5	15.5	9.0	12.0	16.5	13.5	14.5	18.5	13.0	15.5
17	---	---	---	15.0	10.5	12.5	16.0	11.5	13.5	18.0	12.0	15.0
18	---	---	---	15.0	9.5	12.0	15.0	11.0	13.0	19.5	14.0	16.5
19	---	---	---	13.0	11.5	12.5	16.0	10.5	13.0	22.0	15.5	18.5
20	---	---	---	15.5	11.0	13.0	18.0	10.5	14.0	23.0	17.0	20.0
21	---	---	---	15.0	11.5	13.5	14.0	12.5	13.5	23.0	18.5	20.5
22	---	---	---	14.5	9.5	12.0	12.5	9.0	11.0	24.0	19.0	21.5
23	---	---	---	14.5	9.0	11.5	10.5	8.5	9.5	22.0	20.0	20.5
24	---	---	---	14.5	5.5	10.5	12.0	9.0	10.5	22.0	17.5	19.5
25	12.5	9.0	11.0	15.5	11.0	13.0	17.5	9.0	13.0	20.5	15.5	18.5
26	11.5	7.0	9.0	15.0	11.0	12.5	20.0	11.5	15.5	23.5	18.5	21.0
27	8.0	6.5	7.5	14.0	9.5	11.5	20.5	13.5	17.0	21.5	19.5	20.5
28	9.5	7.5	8.5	15.0	11.5	14.0	18.5	14.5	16.5	24.0	20.0	22.0
29	9.0	6.0	7.0	12.5	10.0	11.0	20.0	14.5	17.0	22.0	20.5	21.0
30	---	---	---	13.5	8.0	10.5	19.0	15.5	17.0	20.0	17.5	18.5
31	---	---	---	13.5	8.0	10.5	---	---	---	18.5	15.5	17.0
MONTH	14.0	6.0	10.0	15.5	4.5	10.0	20.5	7.0	13.0	24.0	12.0	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	15.0	17.5	23.5	20.5	22.0	24.0	21.5	23.0	21.5	18.5	20.0
2	21.5	16.5	19.0	23.5	20.5	22.0	25.0	22.5	23.5	21.5	18.0	20.0
3	23.5	18.5	21.0	24.0	21.0	22.5	25.5	23.0	24.5	23.0	19.0	21.0
4	23.0	20.0	21.0	24.0	21.0	23.0	25.5	23.0	24.5	21.5	19.5	20.5
5	23.5	18.5	21.0	25.0	22.0	23.5	25.0	22.5	24.0	20.5	18.5	19.5
6	24.5	21.0	22.5	24.0	21.5	23.0	25.0	22.5	23.5	19.5	17.0	18.5
7	24.5	21.5	23.0	25.5	22.0	23.5	25.0	22.5	24.0	18.5	15.5	17.0
8	24.5	21.0	23.0	23.0	21.0	22.0	24.5	22.0	23.5	19.0	14.5	17.0
9	24.0	20.5	22.5	23.0	19.0	21.0	25.0	22.5	23.5	19.5	16.0	18.0
10	24.0	19.5	22.0	22.0	19.5	21.0	25.0	22.0	23.5	20.0	18.0	19.0
11	24.0	20.0	22.0	24.5	21.0	22.5	25.0	23.5	24.0	20.5	19.0	19.5
12	22.0	19.5	20.5	24.5	22.5	23.5	25.0	23.0	24.0	22.0	19.5	20.5
13	23.0	19.0	20.5	24.0	23.0	23.5	25.0	22.5	23.5	21.0	20.0	20.5
14	23.0	20.0	21.5	23.5	22.0	23.0	24.5	23.0	23.5	23.5	21.0	22.0
15	22.5	19.5	21.0	24.0	21.5	22.5	24.0	22.5	23.5	22.5	19.5	21.0
16	20.5	19.0	20.0	24.0	22.0	23.0	23.5	21.0	22.5	19.0	16.0	18.0
17	22.5	19.0	20.5	22.5	22.0	22.0	23.0	20.5	22.0	17.0	14.5	15.5
18	23.0	19.5	21.0	24.0	22.0	23.0	22.0	21.0	21.5	17.0	14.5	15.5
19	23.5	20.5	22.0	24.0	21.0	22.5	23.0	20.5	21.5	17.5	14.0	15.5
20	23.0	20.5	21.5	24.0	21.5	23.0	22.0	20.0	21.0	18.5	14.5	16.5
21	22.5	20.0	21.0	23.5	21.5	22.5	21.5	18.0	19.5	19.5	15.5	17.5
22	21.5	18.5	19.5	23.5	21.5	22.5	21.5	18.0	19.5	20.0	17.0	18.5
23	20.5	17.5	19.0	24.0	22.0	23.0	21.5	18.5	20.0	19.5	16.0	18.0
24	20.5	18.5	19.5	24.5	22.0	23.5	22.0	19.5	20.5	20.5	17.0	18.5
25	21.5	18.5	19.5	24.0	22.0	23.0	21.0	18.0	19.5	20.5	17.5	19.0
26	20.5	17.0	18.5	24.0	22.0	23.0	20.5	17.0	19.0	21.5	18.0	19.0
27	21.0	16.0	19.0	24.5	22.5	23.0	20.5	17.5	19.0	18.5	14.5	17.0
28	21.5	19.0	20.0	23.0	22.0	22.5	21.0	18.5	20.0	15.5	14.5	15.0
29	22.0	19.0	20.5	21.5	20.0	21.0	22.5	19.5	21.0	15.0	14.5	14.5
30	23.0	19.5	21.5	21.0	20.0	20.5	23.0	20.0	21.5	17.0	15.5	16.0
31	---	---	---	22.0	19.5	21.0	23.0	20.0	21.5	---	---	---
MONTH	24.5	15.0	20.5	25.5	19.0	22.5	25.5	17.0	22.0	23.5	14.0	18.5
YEAR	25.5	4.5	17.5									

02082730?0 DEVILS CRADLE CREEK AT NC 49 NEAR KEARNEY, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, OCTOBER 1984 TO APRIL 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	87	85	86	74	73	73	77	75	76
2	72	71	72	87	85	86	73	44	70	77	60	74
3	73	71	72	87	85	86	98	53	73	76	63	66
4	74	72	73	85	81	83	72	66	68	72	59	63
5	82	72	74	82	80	81	66	56	62	65	63	64
6	76	74	75	82	81	81	67	61	65	67	64	65
7	77	74	75	81	75	77	66	66	66	68	66	67
8	77	74	75	76	74	75	66	66	66	68	67	68
9	76	74	75	74	73	74	67	66	66	68	67	68
10	78	76	77	73	72	73	67	66	67	68	65	67
11	79	76	78	72	69	71	67	66	66	67	65	66
12	79	78	79	73	71	72	68	66	67	67	66	66
13	81	79	79	73	71	72	68	67	67	68	66	67
14	80	79	80	---	---	---	69	68	68	68	66	67
15	81	79	80	---	---	---	70	69	69	67	66	67
16	82	80	81	---	---	---	72	70	71	68	67	67
17	85	82	83	---	---	---	73	71	72	67	63	65
18	85	80	83	---	---	---	74	72	73	65	64	65
19	85	83	84	---	---	---	75	73	74	65	64	65
20	88	85	86	---	---	---	76	74	75	66	62	64
21	88	86	88	---	---	---	79	75	76	71	66	69
22	86	85	86	---	---	---	76	75	76	71	68	69
23	94	86	89	---	---	---	78	76	77	71	66	69
24	---	---	---	---	---	---	77	74	75	68	64	66
25	---	---	---	---	---	---	76	74	75	66	62	64
26	---	---	---	86	70	76	76	74	75	65	62	64
27	---	---	---	84	62	67	76	74	75	66	62	64
28	---	---	---	70	57	65	75	73	74	64	60	62
29	---	---	---	71	66	68	75	74	74	63	60	62
30	93	80	86	74	71	73	76	74	75	62	59	61
31	86	81	84	---	---	---	77	75	76	62	49	58
MONTH	94	71	80	87	57	76	98	44	71	77	49	66

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL					
1	79	44	66	83	79	81	76	70	74			
2	89	71	81	79	75	77	76	70	73			
3	91	87	88	76	72	74	73	68	71			
4	94	88	91	73	71	72	73	68	71			
5	88	83	85	73	70	72	74	70	73			
6	91	80	84	74	71	73	77	72	74			
7	84	82	82	72	69	71	77	74	76			
8	87	84	86	71	66	69	79	75	76			
9	88	86	87	70	66	68	77	74	76			
10	86	83	84	70	65	68	76	72	74			
11	84	81	82	68	65	67	75	72	74			
12	80	50	68	67	63	66	77	72	75			
13	80	77	79	67	62	66	77	74	75			
14	83	79	82	68	64	66	77	74	75			
15	83	81	82	68	64	67	77	75	76			
16	81	80	80	68	64	66	78	76	77			
17	79	77	78	69	64	67	78	76	77			
18	78	75	77	68	63	66	80	77	79			
19	77	75	76	68	64	66	81	79	80			
20	76	74	75	67	64	66	82	79	81			
21	75	72	74	68	65	66	83	80	81			
22	73	70	72	68	63	66	83	80	82			
23	72	69	71	67	64	66	84	80	82			
24	72	68	70	68	60	64	83	81	82			
25	72	69	71	64	60	61	84	82	82			
26	72	66	68	65	61	63	82	79	80			
27	86	73	80	66	61	64	81	80	80			
28	87	83	85	67	61	65	82	80	81			
29	---	---	---	69	63	67	82	80	81			
30	---	---	---	72	66	70	80	79	80			
31	---	---	---	75	68	72	---	---	---			
MONTH	94	44	79	83	60	68	84	68	77			
YEAR	98	44	73									

PAMLICO RIVER BASIN

0208273070 DEVILS CRADLE CREEK AT NC 49 NEAR KEARNEY, NC--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1984 TO APRIL 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	16.0	17.0	18.5	17.5	18.0	10.5	7.5	8.5	15.0	11.5	13.0
2	16.0	14.5	15.5	19.0	16.5	18.0	9.5	6.5	8.0	15.5	13.0	14.0
3	16.0	13.0	14.5	16.0	14.0	14.5	10.5	8.0	9.0	12.5	8.0	9.5
4	17.0	14.0	15.5	16.0	13.5	14.5	9.0	7.5	8.5	8.0	7.0	7.5
5	18.5	15.5	17.0	16.5	15.0	15.5	8.5	6.5	7.5	8.0	6.5	7.5
6	18.5	16.5	17.5	15.5	12.5	14.0	8.0	5.5	7.0	7.5	5.0	6.0
7	18.0	15.5	16.5	13.0	11.0	12.0	5.5	3.5	4.5	8.0	5.0	6.5
8	19.0	16.5	17.5	12.5	9.5	11.0	6.5	3.5	5.0	7.0	5.0	6.0
9	19.0	15.5	17.0	13.0	9.0	11.0	7.0	3.5	5.5	6.0	4.5	5.0
10	18.5	16.0	17.5	13.5	10.0	11.5	8.5	5.0	7.0	4.5	3.5	4.0
11	19.0	16.5	17.5	15.0	13.0	14.0	10.0	7.5	8.5	6.5	4.0	5.0
12	18.5	16.0	17.0	13.0	10.5	12.0	9.5	7.0	8.5	5.0	3.0	4.0
13	18.0	15.5	16.5	11.5	9.5	10.5	11.5	8.5	10.0	6.0	2.5	4.0
14	18.0	14.5	16.0	12.0	9.5	10.5	12.5	9.5	11.0	5.5	3.0	4.0
15	17.0	13.5	15.5	12.0	9.0	10.5	13.5	11.0	12.0	5.0	2.5	3.5
16	18.5	16.0	17.0	13.5	12.0	12.5	13.0	11.5	12.5	5.0	2.0	3.5
17	18.0	16.5	17.5	11.5	10.0	11.0	14.0	12.5	13.0	4.5	3.5	4.0
18	19.0	18.0	18.5	11.0	8.5	10.0	14.5	11.0	13.0	6.0	3.5	5.0
19	19.5	18.0	18.5	11.5	10.5	11.0	15.5	13.0	14.0	7.5	5.0	5.5
20	20.5	18.0	19.0	10.5	9.0	10.0	14.5	13.5	14.0	5.0	.0	2.5
21	19.5	18.5	19.0	9.0	8.0	8.5	15.0	13.5	14.0	1.5	.0	.5
22	20.0	18.5	19.5	9.0	7.5	8.5	15.0	12.5	14.0	3.5	.5	1.5
23	19.5	19.0	19.5	10.0	7.5	8.5	12.0	9.0	10.5	4.5	1.0	2.5
24	20.0	18.5	19.0	9.5	7.5	8.5	10.5	7.0	9.0	5.5	1.5	3.0
25	19.5	18.5	19.0	10.0	8.0	9.0	13.0	9.0	11.5	5.5	2.0	3.5
26	19.5	18.5	19.0	10.0	7.5	9.0	9.5	7.0	8.5	4.5	1.5	2.5
27	18.5	17.5	18.0	11.0	7.0	9.0	12.0	9.5	10.5	5.0	1.5	3.0
28	19.5	18.5	19.0	13.5	10.0	12.0	12.5	9.0	11.0	4.5	3.0	4.0
29	21.5	19.0	20.0	10.0	8.0	9.0	13.5	10.0	12.0	5.5	2.5	4.0
30	19.5	18.5	19.0	9.5	6.5	8.0	14.5	11.5	13.0	6.0	3.5	5.0
31	19.5	18.5	19.0	---	---	---	12.5	11.5	12.0	5.5	4.0	5.0
MONTH	21.5	13.0	17.5	19.0	6.5	11.5	15.5	3.5	10.0	15.5	.0	5.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL				
1	5.5	4.0	5.0	11.5	6.5	9.5	19.0	13.5	15.5			
2	5.5	5.0	5.0	13.5	8.5	11.0	17.0	10.5	13.0			
3	6.5	4.5	5.5	13.5	8.5	11.0	16.0	9.0	12.5			
4	6.0	3.0	4.5	13.5	10.0	12.0	19.0	10.5	14.5			
5	4.5	4.0	4.0	17.5	12.5	14.5	20.0	14.0	16.5			
6	5.5	3.5	4.5	13.5	9.0	11.0	19.5	14.0	16.5			
7	6.5	4.0	5.0	12.5	7.0	9.5	19.0	12.5	15.0			
8	4.5	2.0	3.0	15.0	9.0	12.0	16.0	11.0	13.0			
9	5.0	1.5	3.0	15.0	11.0	13.0	14.5	9.5	11.5			
10	6.0	2.0	4.0	14.5	8.5	11.5	14.5	7.0	10.5			
11	7.0	2.5	5.0	11.5	8.0	10.5	16.5	10.0	13.0			
12	7.0	4.5	6.0	16.0	11.5	13.0	20.0	12.5	16.0			
13	6.5	3.0	4.5	15.5	9.5	12.5	19.0	13.0	16.0			
14	7.0	3.0	5.0	13.5	10.5	12.5	17.0	15.0	16.0			
15	7.5	3.5	5.0	15.0	10.0	12.0	18.0	15.0	16.5			
16	7.0	2.5	4.5	13.5	7.5	10.5	20.5	15.5	17.0			
17	8.0	3.5	5.5	14.5	10.5	12.0	20.0	15.0	17.0			
18	8.5	3.5	6.0	13.0	8.0	10.0	20.0	12.5	16.0			
19	9.5	6.5	8.0	12.5	5.5	9.0	22.5	15.0	18.5			
20	10.0	6.5	8.0	14.5	7.0	10.5	23.0	15.0	18.5			
21	10.0	4.5	7.5	11.5	9.0	10.5	23.0	15.0	18.5			
22	12.5	7.0	9.5	9.0	7.5	8.5	22.5	14.5	18.0			
23	13.5	8.5	11.0	11.5	8.0	9.5	22.0	15.0	18.0			
24	16.5	11.5	13.5	11.5	8.5	10.0	20.0	15.0	18.0			
25	15.5	14.0	14.5	13.0	9.0	10.5	22.5	16.5	19.0			
26	13.5	11.5	12.5	15.0	7.0	10.5	21.5	14.5	18.0			
27	14.5	11.0	12.5	16.5	9.0	12.5	19.5	15.5	18.0			
28	12.5	8.0	10.0	19.5	11.0	15.0	22.5	17.0	19.5			
29	---	---	---	21.5	14.5	18.0	20.5	15.0	18.0			
30	---	---	---	22.5	16.0	18.5	20.0	13.0	16.5			
31	---	---	---	18.5	14.0	16.0	---	---	---			
MONTH	16.5	1.5	7.0	22.5	5.5	12.0	23.0	7.0	16.0			
YEAR	23.0	.0	11.5									

02082770 SWIFT CREEK AT HILLIARDSTON, NC

LOCATION.--Lat 36°06'42", long 77°55'16", Nash County, Hydrologic Unit 03020101, near left bank at downstream side of bridge on Secondary Road 1310, 0.7 mi northeast of Hilliardston, and 2.8 mi downstream from Gideon Swamp.

DRAINAGE AREA.--166 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1963 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 130.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--22 years, 154 ft³/s, 12.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,030 ft³/s June 5, 1979, gage height, 14.27 ft; minimum, 0.60 ft³/s Sept. 25, 26, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1924 reached a stage of 14.5 ft, discharge not determined, from information by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 2	1900	1,250	9.34	July 29	0400	*1,870	*11.65

Minimum discharge, 13 ft³/s Sept 17; minimum gage height, 2.08 ft, July 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	70	99	68	824	198	115	54	46	128	171	43
2	87	57	78	67	1130	171	110	53	44	123	219	40
3	92	51	244	138	1190	155	104	91	42	93	114	38
4	69	50	287	566	1060	142	100	170	40	72	86	35
5	53	76	243	624	780	137	99	127	40	54	71	33
6	46	91	337	640	522	133	98	89	50	47	61	30
7	43	66	317	511	456	123	100	73	41	62	56	27
8	43	55	259	241	416	119	96	65	42	47	53	26
9	42	50	156	168	328	119	92	59	43	42	53	23
10	40	47	116	138	237	118	88	65	41	36	53	22
11	38	49	103	126	203	114	87	68	39	98	56	21
12	38	53	96	124	617	115	88	66	40	118	47	20
13	38	60	91	117	795	114	87	109	49	72	42	19
14	37	58	86	109	677	111	92	97	45	53	38	17
15	37	51	83	103	490	107	99	78	48	44	35	16
16	37	48	80	99	284	103	102	66	43	36	34	16
17	37	47	80	100	226	103	112	82	66	33	35	14
18	38	47	78	131	196	104	104	64	111	64	48	15
19	42	48	77	133	178	101	96	60	111	61	238	15
20	45	54	76	119	170	99	87	54	75	46	195	14
21	46	67	76	e105	161	97	81	51	52	34	94	14
22	45	67	76	e100	147	138	76	49	41	28	73	15
23	51	59	76	e98	141	193	71	57	36	23	64	18
24	54	54	75	e94	137	169	68	111	33	20	54	21
25	54	53	72	e90	135	321	66	97	30	152	75	25
26	52	53	69	113	266	249	64	99	27	438	127	26
27	51	52	67	108	337	178	62	76	26	366	83	44
28	49	60	66	97	267	143	60	63	23	1450	72	59
29	49	105	66	101	---	131	57	54	22	1750	73	55
30	47	118	68	111	---	125	54	50	77	702	81	44
31	54	---	68	153	---	118	---	47	---	177	53	---
TOTAL	1508	1816	3765	5492	12370	4348	2615	2344	1423	6469	2554	805
MEAN	48.6	60.5	121	177	442	140	87.2	75.6	47.4	209	82.4	26.8
MAX	92	118	337	640	1190	321	115	170	111	1750	238	59
MIN	37	47	66	67	135	97	54	47	22	20	34	14
CFSM	.29	.36	.73	1.07	2.66	.84	.53	.46	.29	1.26	.50	.16
IN.	.34	.41	.84	1.23	2.77	.97	.59	.53	.32	1.45	.57	.18

CAL YR 1984 TOTAL 99408 MEAN 272 MAX 4790 MIN 32 CFSM 1.64 IN. 22.28
WTR YR 1985 TOTAL 45509 MEAN 125 MAX 1750 MIN 14 CFSM .75 IN. 10.20

e Estimated

02082770 SWIFT CREEK AT HILLIARDSTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/19	1030	WATER	0	2.39	41	60	6.40	18.0		8.4	20
84/11/15	0950	WATER	0	2.48	51	45	7.20	8.0	7.0	11.6	140
84/12/13	0900	WATER	0	2.69	92	40		7.0		11.2	220
85/01/14	0820	WATER	0	2.77	110	35		4.0		12.0	340
85/02/21	0930	WATER	0	3.01	163	35	7.00	5.0	17.0	11.5	150
85/03/06	0845	WATER	0	2.88	134	47	7.00	11.0		10.1	90
85/04/16	0900	WATER	0	2.81	99	60	7.00	17.0		9.1	110
85/05/13	0910	WATER	0	2.92	130	65	7.10	20.0	7.0	7.8	290
85/06/18	0900	WATER	0	2.49	76	70	6.80	23.0		7.2	180
85/07/16	0900	WATER	0	2.24	35	72	6.90	24.0		6.4	130
85/08/28	1020	WATER	0.1	2.50	74	62	7.00	22.0	13.0	8.2	200
85/09/10	0915	WATER	0.1	2.19	21	75	7.00	24.0		7.0	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/19	1030	WATER	0	31	3	130					
84/11/15	0950	WATER	0	33	1	110	.19	.020	.200	.050	.010
84/12/13	0900	WATER	0	23	3	73					
85/01/14	0820	WATER	0		6	77					
85/02/21	0930	WATER	0	125	8	77	.42	.040	.200	.050	.010
85/03/06	0845	WATER	0	37	12	85					
85/04/16	0900	WATER	0	35	4	91					
85/05/13	0910	WATER	0	236	14	100	.48	.080	.400	.090	.010
85/06/18	0900	WATER	0	26	22	120					
85/07/16	0900	WATER	0	24	16	100					
85/08/28	1020	WATER	0.1	28	10	84	.41	.040	.300	.060	.020
85/09/10	0915	WATER	0.1	31	5	97					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/15	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	0910	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/28	1020	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02082950 LITTLE FISHING CREEK NEAR WHITE OAK, NC

LOCATION.--Lat 36°11'08", long 77°52'34", Halifax County, Hydrologic Unit 03020102, on right bank 8 ft downstream from bridge on Secondary Road 1338, 1.1 mi west of White Oak, 1.8 mi upstream from Powells Creek, 4.3 mi upstream from mouth, and 12 mi west of Enfield.

DISCHARGE AREA.--177 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 1723: 1960(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 116.44 ft above National Geodetic Vertical Datum of 1929. Feb. 14, 1962 to Apr. 23, 1979, auxiliary nonrecording gage 3.6 mi downstream.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--26 years, 167 ft^3/s, 12.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft^3/s Oct. 7, 1972, gage height, 24.80 ft from floodmarks, from rating curve extended above 6,900 ft^3/s on basis of slope-conveyance study of peak flow; minimum, 0.72 ft^3/s Sept. 5, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1959 reached a stage of 19.3 ft from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 5	1130	1,250	10.44	Feb. 13	2000	1,260	10.46
Feb. 3	0100	*1,820	*13.05				

Minimum discharge, 15.0 ft^3/s June 28, 29, gage height, 1.95 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	44	87	64	1130	190	95	45	29	227	182	82
2	61	40	68	65	1600	177	90	43	27	452	340	60
3	53	38	415	204	1700	162	85	93	25	211	211	50
4	42	37	484	932	946	147	83	155	23	72	105	45
5	36	79	231	1200	401	145	81	85	22	46	75	41
6	33	114	429	793	486	138	82	62	27	36	63	37
7	31	65	437	287	549	124	86	52	45	33	57	35
8	31	49	197	198	400	118	78	46	37	32	52	32
9	31	42	134	157	272	121	74	42	30	29	49	31
10	31	41	112	133	226	118	70	45	26	36	48	30
11	29	42	103	129	209	111	70	52	25	263	46	29
12	28	47	97	135	736	112	72	76	28	122	41	27
13	28	47	91	129	1140	110	72	258	32	65	38	26
14	28	42	86	118	876	103	75	138	34	40	35	24
15	27	39	83	114	356	100	84	72	27	33	33	23
16	27	38	81	103	266	96	184	56	32	29	32	23
17	27	38	80	106	229	94	161	69	62	148	40	22
18	28	38	80	167	208	95	131	51	88	124	73	22
19	29	42	79	161	192	89	91	46	39	55	357	21
20	31	62	78	133	185	87	80	39	29	35	410	21
21	32	77	76	103	175	88	72	35	23	29	113	21
22	32	55	76	103	160	118	65	34	22	25	79	22
23	34	48	79	98	157	176	61	50	19	23	87	23
24	41	46	75	104	155	168	58	78	18	23	60	26
25	39	45	69	113	152	259	56	81	17	133	58	28
26	38	44	68	118	296	184	54	62	17	609	159	27
27	37	43	64	109	395	133	51	46	16	481	109	57
28	36	52	65	107	252	119	50	37	16	735	77	100
29	35	169	69	112	---	112	50	33	15	560	80	62
30	48	143	68	114	---	106	47	31	77	301	120	39
31	55	---	66	189	---	98	---	30	---	325	91	---
TOTAL	1100	1706	4227	6598	13849	3998	2408	2042	927	5332	3360	1086
MEAN	35.5	56.9	136	213	495	129	80.3	65.9	30.9	172	108	36.2
MAX	61	169	484	1200	1700	259	184	258	88	735	410	100
MIN	27	37	64	64	152	87	47	30	15	23	32	21
CFSM	.20	.32	.77	1.20	2.80	.73	.45	.37	.17	.97	.61	.20
IN.	.23	.36	.89	1.39	2.91	.84	.51	.43	.19	1.12	.71	.23

CAL YR 1984 TOTAL 103867 MEAN 284 MAX 7580 MIN 27 CFSM 1.60 IN. 21.83
WTR YR 1985 TOTAL 46633 MEAN 128 MAX 1700 MIN 15 CFSM .72 IN. 9.80

02082950 LITTLE FISHING CREEK NEAR WHITE OAK, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/19	1100	WATER	0	2.30	29	70	6.60	18.0		8.2	20
84/11/15	1030	WATER	0	2.50	39	50	7.20	7.0	6.0	11.6	100
84/12/13	0930	WATER	0	3.21	91	40		7.0		11.7	50
85/01/14	0850	WATER	0	3.45	119	34		4.0		12.2	50
85/02/21	1010	WATER	0	3.94	175	38	7.00	6.0	12.0	11.9	40
85/03/06	0910	WATER	0	3.68	140	49	7.10	11.0		10.0	50
85/04/16	1000	WATER	0	3.12	89	62	7.10	17.0		9.2	40
85/05/13	0950	WATER	0	4.71	278	56	7.10	20.0	80.0	7.7	2000
85/06/18	0945	WATER	0	2.78	60	82	6.90	23.0		7.2	350
85/07/16	0915	WATER	0	2.26	29	70	6.90	24.0		6.7	190
85/08/28	1050	WATER	0.1	2.86	70	67	7.00	23.0	18.0	8.2	170
85/09/10	0940	WATER	0.1	2.25	28	86	7.00	24.0		7.6	100

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/19	1100	WATER	0	40	4	130					
84/11/15	1030	WATER	0	35	3	96	.16	.020	.300	.100	.010K
84/12/13	0930	WATER	0	27	4	78					
85/01/14	0850	WATER	0		4	90					
85/02/21	1010	WATER	0	134	8	78	.20	.030	.300	.030	.010
85/03/06	0910	WATER	0	40	7	83					
85/04/16	1000	WATER	0	42	3	85					
85/05/13	0950	WATER	0	200	110	230	.30	.060	.500	.190	.010
85/06/18	0945	WATER	0	37	30	140					
85/07/16	0915	WATER	0	29	20	110					
85/08/28	1050	WATER	0.1	28	13	89	.19	.030	.400	.060	.010
85/09/10	0940	WATER	0.1	40	5	120					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/15	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	1010	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/28	1050	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PAMLICO RIVER BASIN

02083000 FISHING CREEK NEAR ENFIELD, NC

LOCATION.--Lat 36°09'03", long 77°41'35", Edgecombe County, Hydrologic Unit 03020102, on right bank 15 ft downstream from bridge on U.S. Highway 301, 2,000 ft downstream from Seaboard Coast Line Railroad bridge, 2 mi southwest of Enfield, 4.8 mi downstream from Rocky Creek, and 40 mi upstream from mouth.

DRAINAGE AREA.--526 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1923 to current year. Figures of daily discharge below 250 ft^3/s Oct 1, 1923 to July 3, 1924, below 350 ft^3/s May 30, 1925 to May 31, 1926, below 150 ft^3/s June 1 to Nov. 16, 1926, and below 100 ft^3/s Nov. 17, 1926, to Sept. 30, 1928, published in WSP 622, 642, and 662 are unreliable and should not be used. Gage-height records collected at site 2,000 ft upstream at different datum July 1, 1910 to Apr. 30, 1914, and at present site and datum since May 1, 1914, are contained in reports of National Weather Service, NOAA, U.S. Department of Commerce.

REVISED RECORDS.--WSP 872: 1935(M). WSP 1333: 1928(M), 1932-33, 1935. WDR NC-81-1: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 76.26 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 28, 1932, nonrecording gage, at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Slight diurnal fluctuation and some regulation at low flow caused by mills above station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--62 years, 494 ft^3/s, 12.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft^3/s Dec. 2, 1934, Aug. 18, 1940; maximum gage height, 17.72 ft Aug. 18, 1940; minimum daily discharge, 6.9 ft^3/s Oct. 5, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Apr. 19, 1910 reached a stage of 20.1 ft, present datum (from floodmarks of Seaboard Coast Line Railroad Co.) at site 2,000 ft upstream. Flood of July 24, 1919, reached a stage of 19.6 ft discharge, 20,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,180 ft^3/s Feb. 4, gage height, 13.91 ft; minimum, 59 ft^3/s Sept. 19, 20, 22; minimum gage height, 0.30 ft June 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	143	276	154	1770	641	341	174	122	212	575	270
2	148	129	199	153	2910	541	326	166	128	645	1120	217
3	189	116	425	196	3680	502	309	180	111	679	772	178
4	173	110	1010	1470	4120	456	296	378	103	381	433	152
5	139	125	836	2250	3390	431	290	395	97	232	278	136
6	120	225	717	2550	2260	419	287	267	98	169	212	125
7	110	232	1070	2050	1820	387	294	212	105	145	181	118
8	105	165	779	1190	1520	364	289	186	131	132	164	105
9	104	132	472	626	1020	363	272	159	144	122	153	98
10	103	117	310	475	712	363	261	159	125	116	149	92
11	99	114	256	420	605	351	255	173	119	348	167	89
12	94	117	236	413	1250	345	257	180	112	537	158	95
13	90	127	222	410	2380	343	259	376	119	354	133	81
14	89	134	209	380	2710	331	263	495	128	235	118	75
15	88	118	200	356	2220	319	276	313	128	170	108	72
16	87	107	193	334	1320	311	293	204	120	146	101	68
17	87	102	189	320	768	305	846	234	157	148	106	74
18	87	101	188	391	615	306	673	218	283	240	140	70
19	90	103	185	494	557	301	438	181	624	236	462	61
20	97	111	182	443	526	290	322	159	350	180	1380	62
21	106	158	181	343	505	288	281	143	199	138	909	62
22	106	177	180	254	467	343	252	130	138	114	382	61
23	101	143	178	319	443	574	233	125	112	96	255	67
24	110	125	178	310	435	587	220	186	95	89	229	70
25	117	117	170	314	428	712	210	234	86	113	188	81
26	117	114	162	320	550	753	203	260	79	1140	365	86
27	114	112	156	298	1040	554	197	205	80	1230	462	154
28	111	116	152	319	926	453	187	161	92	2540	323	221
29	108	184	154	333	---	412	185	141	80	2760	226	245
30	105	333	157	349	---	386	180	129	77	2140	268	180
31	134	---	156	396	---	362	---	119	---	1080	361	---
TOTAL	3442	4207	9978	18630	40947	13093	8995	6652	4342	16867	10878	3465
MEAN	111	140	322	601	1462	422	300	215	145	544	351	116
MAX	189	333	1070	2550	4120	753	846	495	624	2760	1380	270
MIN	87	101	152	153	428	288	180	119	77	89	101	61
CFSM	.21	.27	.61	1.14	2.78	.80	.57	.41	.28	1.03	.67	.22
IN.	.24	.30	.71	1.32	2.90	.93	.64	.47	.31	1.19	.77	.25

CAL YR 1984 TOTAL 301346 MEAN 823 MAX 10600 MIN 87 CFSM 1.56 IN. 21.31
WTR YR 1985 TOTAL 141496 MEAN 388 MAX 4120 MIN 61 CFSM .74 IN. 10.01

02083000 FISHING CREEK NEAR ENFIELD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/19	1130	WATER	0	.97	88	60	6.60	19.0		8.8	20
84/11/15	1100	WATER	0	1.45	118	50	7.30	8.0	6.8	11.0	50
84/12/13	1010	WATER	0	2.66	299	41		7.0		12.0	30
85/01/14	0920	WATER	0	3.21	377	35		4.0		11.8	90
85/02/21	1050	WATER	0	4.26	535	40	7.10	6.0	18.0	11.5	50
85/03/06	0940	WATER	0	3.68	437	50	7.10	12.0		10.2	60
85/04/16	1030	WATER	0	2.45	296	66	7.10	17.0		9.0	40
85/05/13	1030	WATER	0	2.64	302	60	7.20	20.0	5.1	7.9	130
85/06/18	1015	WATER	0	1.53	182	77	6.90	24.0		7.2	170
85/07/16	0940	WATER	0	.96	122	68	6.90	25.0		6.0	20
85/08/28	1130	WATER	0.1	2.83	322	66	7.00	24.0	17.0	8.4	10
85/09/10	1015	WATER	0.1	.72	93	82	7.00	25.0		7.0	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/19	1130	WATER	0	36	6	120					
84/11/15	1100	WATER	0	40	1K	100	.07	.010	.200	.060	.010K
84/12/13	1010	WATER	0	27	7	76					
85/01/14	0920	WATER	0		5	83					
85/02/21	1050	WATER	0	170	5	88	.24	.200	.400	.040	.010K
85/03/06	0940	WATER	0	34	6	89					
85/04/16	1030	WATER	0	41	5	90					
85/05/13	1030	WATER	0	300	7	99	.23	.050	.300	.050	.010
85/06/18	1015	WATER	0	28	20	120					
85/07/16	0940	WATER	0	23	14	95					
85/08/28	1130	WATER	0.1	25	8	96	.20	.040	.300	.070	.010
85/09/10	1015	WATER	0.1	37	7	98					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/15	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	1050	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/28	1130	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02083500 TAR RIVER AT TARBORO, NC
(National stream-quality accounting network station)

LOCATION.--Lat 35°53'38", long 77°32'00", Edgecombe County, Hydrologic Unit 03020103, near right bank on downstream end of pier of bridge on U.S. Highway 64 in Tarboro, 6.5 mi downstream from Fishing Creek, and 49.2 mi upstream from Pamlico River at Washington.

DRAINAGE AREA.--2,183 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1896 to December 1900, October 1931 to current year. Gage-height records at various datums collected at same site since 1905 are contained in reports of National Weather Service, NOAA, U.S. Department of Commerce.

REVISED RECORDS.--WSP 1273: 1899-1900, 1933. WSP 1503: 1932. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 10.37 ft above National Geodetic Vertical Datum of 1929. July 1896 to December 1900, nonrecording gage at Seaboard Coast Line Railroad bridge 600 ft downstream at different datum; Oct. 1 to Dec. 8, 1931, nonrecording gage at site 100 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow caused by mills above station. Town of Tarboro diverted 3.6 ft³/s for municipal water supply.

AVERAGE DISCHARGE.--58 years, 2,232 ft³/s, 13.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s Aug. 20, 1940, gage height, 31.77 ft; minimum, 36 ft³/s Oct. 17, 22, 1933, Oct. 6, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 27, 1919 reached a stage of 34.0 ft, present datum, from floodmarks, discharge, 52,800 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,900 ft³/s Feb. 8, gage height, 20.75 ft; minimum, 172 ft³/s June 29, gage height, 1.58 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	386	563	639	2300	3830	1540	487	333	412	4960	704
2	527	397	662	623	3790	3650	1400	468	312	518	6100	640
3	513	414	725	683	5710	3070	1270	405	302	485	6810	556
4	606	408	901	1100	7110	2700	1170	437	337	784	6770	445
5	983	418	1090	2650	8480	2420	1060	452	275	735	4630	473
6	908	434	1690	4360	10100	2180	1030	803	392	649	2540	365
7	987	429	2020	5050	11200	1970	1010	922	477	515	1500	363
8	627	511	2370	5700	11800	1780	944	741	335	437	1050	391
9	524	518	2840	6210	10500	1660	908	628	290	374	820	301
10	613	476	2250	5110	8110	1570	864	557	290	332	717	306
11	637	446	1620	3230	6090	1510	828	472	354	733	621	300
12	448	424	1350	2380	5150	1460	770	494	280	855	509	287
13	405	412	1220	1920	5250	1430	783	460	279	754	536	279
14	386	414	1110	1690	5990	1330	798	518	296	850	944	275
15	374	422	1010	1510	6690	1310	813	728	279	691	684	268
16	364	428	941	1380	7150	1250	848	776	319	593	492	263
17	474	417	884	1290	6820	1220	1230	690	600	512	399	256
18	317	408	844	1320	5980	1150	1370	599	591	563	402	251
19	302	400	815	1370	4720	1140	1560	542	390	469	714	247
20	353	399	797	1480	3470	1090	1320	526	749	451	1220	246
21	357	401	785	1490	2860	1030	1090	472	893	391	1660	237
22	357	409	735	1300	2530	1050	952	410	798	385	2190	247
23	363	451	729	1250	2330	1310	853	418	639	349	1680	266
24	374	477	735	1250	2160	1720	738	372	439	310	1310	259
25	375	461	727	1020	2050	2080	687	466	402	336	1150	240
26	380	447	715	1030	2090	2380	634	719	281	586	1030	259
27	389	438	689	1080	2380	2730	592	726	285	1190	1210	865
28	396	453	679	1090	3090	2750	551	648	225	2540	1240	1120
29	392	489	644	1100	---	2340	498	547	213	4150	1080	746
30	391	526	643	1160	---	2020	557	453	208	4860	871	653
31	388	---	634	1310	---	1730	---	389	---	5120	712	---
TOTAL	15001	13113	33417	62775	155900	58860	28668	17325	11863	31929	56551	12108
MEAN	484	437	1078	2025	5568	1899	956	559	395	1030	1824	404
MAX	987	526	2840	6210	11800	3830	1560	922	893	5120	6810	1120
MIN	302	386	563	623	2050	1030	498	372	208	310	399	237
CFSM	.22	.20	.49	.93	2.55	.87	.44	.26	.18	.47	.84	.19
IN.	.26	.22	.57	1.07	2.66	1.00	.49	.30	.20	.54	.96	.21

CAL YR 1984 TOTAL 1210439 MEAN 3307 MAX 20600 MIN 302 CFSM 1.51 IN. 20.63
WTR YR 1985 TOTAL 497510 MEAN 1363 MAX 11800 MIN 208 CFSM .62 IN. 8.48

PAMLICO RIVER BASIN

02083500 TAR RIVER AT TARBORO, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1945, 1954, 1958 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1967, July 1973 to current year.
WATER TEMPERATURE: October 1944 to September 1945, October 1953 to September 1954, October 1961 to September 1967, July 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1981.

REMARKS.--Station operated as part of NASQAN network from October 1974 to present. Interruptions in the daily record were due to malfunctions of the monitor. Daily records of specific conductance for water years 1954, 1959-64 are available in files of district office in Raleigh, NC. Miscellaneous chemical data published for water years 1944, 1947, 1955-61.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 279 microsiemens Feb. 2, 1983; minimum daily, 34 microsiemens Aug. 22, 1967.
WATER TEMPERATURE: Maximum, 32.5°C July 18, 21, 1983; minimum daily, 0.0°C on several days in 1963 and 1966, Jan. 18, 19, 1977, Jan. 18, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 189 microsiemens June 7; minimum, 52 microsiemens July 11.
WATER TEMPERATURE: Maximum, 29.5°C July 21,22; minimum recorded, 2.0°C Nov. 21, Dec. 8, 10, Feb. 10, 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV												
08...	1050	516	105	6.6	11.5	4.1	764	9.7	89	K72	K56	29
JAN												
31...	1030	1320	90	5.7	3.0	5.5	758	12.9	96	K76	220	23
MAY												
29...	1100	570	85	6.2	23.5	6.7	759	7.5	89	450	K8	24
JUL												
30...	1100	4860	75	6.2	24.0	30	762	--	--	250	1300	17

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV												
08...	0	6.9	2.8	9.0	38	.8	2.9	6.3	7.6	.10	18	93
JAN												
31...	4	5.6	2.1	8.1	41	.8	1.9	7.5	9.5	.10	16	78
MAY												
29...	0	5.2	2.6	8.8	42	.8	1.9	5.4	5.8	.10	15	64
JUL												
30...	5	4.1	1.6	5.4	37	.6	2.2	8.9	5.1	<.10	10	68

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
NOV											
08....	74	.13	130	.48	<.010	--	.20	.160	.140	.130	.40
JAN											
31....	63	.11	278	.44	.150	.19	.30	.070	.060	.060	.18
MAY											
29....	62	.09	98	.56	.080	.10	.30	.120	.130	.110	.34
JUL											
30....	46	.09	892	.76	.140	.18	.60	.150	.120	.120	.37

K Results based on colony count outside the acceptable range (non-ideal colony count).

02083500 TAR RIVER AT TARBORO, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
NOV 08...	--	--	22	<.5	<1	--	<3	--	700	--	<4
JAN 31...	40	<1	27	<.5	<1	<1	<3	1	300	4	<4
MAY 29...	30	<1	27	<.5	<1	6	<3	2	600	5	<4
JUL 30...	200	1	34	<.5	<1	5	<3	5	430	3	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 08...	3	--	<10	--	--	--	53	<6	<3	11	15	66
JAN 31...	18	.5	<10	6	<1	<1	38	<6	13	19	68	34
MAY 29...	37	.2	<10	2	<1	<1	47	<6	14	12	18	86
JUL 30...	33	<.1	<10	12	<1	<1	35	<6	10	54	709	91

02083500 TAR RIVER AT TARBORO, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	133	121	126	123	108	115	108	96	102	119	99	111
2	139	119	130	128	115	121	104	95	99	124	105	116
3	136	115	128	135	123	129	107	96	103	122	106	116
4	134	117	125	129	118	124	109	96	102	110	101	105
5	138	98	115	132	118	126	102	95	97	---	---	---
6	123	108	114	123	112	118	101	92	97	---	---	---
7	123	106	111	116	107	111	99	83	91	---	---	---
8	130	114	118	116	95	106	92	81	87	---	---	---
9	135	117	127	113	101	107	93	82	88	---	---	---
10	138	113	128	113	103	109	93	81	87	---	---	---
11	142	110	121	116	105	112	95	90	92	---	---	---
12	126	111	118	118	102	110	95	90	93	---	---	---
13	136	124	128	110	97	101	99	93	96	---	---	---
14	139	127	134	104	89	97	103	96	98	---	---	---
15	142	134	138	103	86	93	107	98	102	---	---	---
16	141	126	133	117	96	103	109	99	104	---	---	---
17	137	125	131	109	92	99	113	97	102	---	---	---
18	135	107	122	104	92	97	117	99	106	---	---	---
19	121	103	107	111	95	100	119	95	108	---	---	---
20	149	103	115	99	89	94	98	94	96	---	---	---
21	168	133	149	98	81	89	100	90	96	---	---	---
22	139	129	134	93	84	89	115	99	105	---	---	---
23	135	123	128	98	84	92	126	104	110	---	---	---
24	129	116	121	100	87	94	118	102	110	---	---	---
25	124	117	120	102	87	94	108	97	101	---	---	---
26	131	114	121	103	89	93	123	97	106	---	---	---
27	132	115	123	105	87	95	112	96	101	---	---	---
28	121	116	118	116	101	107	115	97	106	---	---	---
29	123	117	119	107	98	102	119	96	108	---	---	---
30	126	116	119	108	93	102	121	107	114	---	---	---
31	123	112	115	---	---	---	121	110	116	98	86	95
MONTH	168	98	124	135	81	104	126	81	101	124	86	109

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	101	81	94	83	81	82	89	83	86	107	101	105
2	96	85	89	85	82	84	89	82	85	114	100	106
3	84	72	78	85	84	84	91	85	88	111	105	108
4	72	65	68	86	85	85	92	84	89	111	105	107
5	64	62	63	86	85	86	94	86	91	125	108	118
6	62	60	61	89	85	87	95	91	93	120	102	110
7	60	58	58	92	87	89	96	92	94	109	96	100
8	63	58	61	93	89	90	96	90	92	101	94	97
9	65	63	64	96	89	94	93	88	90	101	98	99
10	69	65	67	95	89	93	93	89	91	106	101	103
11	73	69	70	94	88	91	96	90	92	109	103	106
12	75	70	74	94	88	91	95	94	95	113	103	107
13	75	71	73	95	89	93	103	95	98	115	106	110
14	72	68	70	98	90	95	99	95	96	114	102	107
15	68	65	66	99	90	95	97	95	96	110	94	100
16	66	65	65	99	93	96	97	90	95	104	92	97
17	66	65	66	101	90	96	92	82	86	---	---	---
18	68	66	66	96	86	92	95	87	92	---	---	---
19	72	68	70	91	86	89	91	80	87	---	---	---
20	76	73	74	91	85	88	91	80	86	---	---	---
21	79	76	77	92	88	90	92	85	89	---	---	---
22	80	79	79	106	88	93	94	88	91	---	---	---
23	83	80	81	99	90	95	95	91	93	---	---	---
24	84	83	83	93	86	89	97	91	94	---	---	---
25	84	83	84	88	83	85	103	96	100	---	---	---
26	86	84	84	84	80	82	108	98	102	---	---	---
27	88	86	87	84	79	81	106	98	102	---	---	---
28	87	82	85	82	79	80	107	98	103	---	---	---
29	---	---	---	84	79	81	108	99	103	90	85	87
30	---	---	---	85	79	82	112	100	105	95	85	91
31	---	---	---	87	82	84	---	---	---	108	88	99
MONTH	101	58	73	106	79	88	112	80	93	125	85	103

02083500 TAR RIVER AT TARBORO, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	111	96	100	156	91	126	70	65	68	96	90	93
2	117	103	111	137	98	107	70	64	67	98	89	94
3	121	102	112	104	92	99	68	64	66	96	89	92
4	115	108	111	96	83	91	72	68	70	97	89	93
5	114	76	106	87	79	81	77	73	75	113	93	98
6	125	77	108	102	88	94	79	77	78	114	104	108
7	189	102	122	88	86	86	85	79	82	103	101	102
8	108	102	106	92	86	91	91	86	89	135	103	121
9	119	108	111	96	92	94	101	92	94	122	113	117
10	125	111	119	97	89	96	106	97	100	113	104	107
11	159	109	124	105	52	90	108	97	102	125	105	115
12	150	107	122	105	91	95	108	100	103	122	117	119
13	112	108	110	97	87	93	109	101	103	121	117	119
14	149	108	119	101	74	91	109	84	98	125	119	121
15	150	122	134	99	90	96	90	83	86	129	120	126
16	126	85	114	99	96	97	100	91	96	128	122	124
17	137	112	126	98	92	95	111	101	107	127	119	123
18	107	92	98	117	94	103	106	92	102	121	116	119
19	104	101	103	103	100	102	125	92	112	119	113	116
20	123	101	107	108	100	104	111	81	87	122	118	121
21	109	100	105	105	97	99	80	77	79	132	123	126
22	107	98	102	116	104	110	77	71	74	133	101	121
23	110	97	102	119	106	115	77	72	76	128	116	122
24	113	105	109	112	107	109	84	77	80	126	119	123
25	106	104	104	112	88	107	85	79	81	125	112	118
26	130	107	119	122	111	117	88	81	84	120	72	110
27	111	104	107	117	92	101	87	82	84	107	56	95
28	160	106	135	93	79	86	85	83	84	105	94	99
29	154	114	130	81	75	79	85	82	83	110	96	103
30	113	111	112	79	71	73	91	83	86	111	108	110
31	---	---	---	71	69	69	93	87	90	---	---	---
MONTH	189	76	113	156	52	97	125	64	87	135	56	112
YEAR	189	52	100									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	14.5	16.0	21.5	19.0	20.5	7.5	6.0	7.0	13.0	10.5	12.0
2	16.0	12.5	14.0	21.5	17.5	20.0	7.5	5.0	6.5	13.5	11.5	12.5
3	15.5	11.5	13.5	17.0	13.5	15.5	8.5	7.0	8.0	12.0	9.0	10.5
4	16.5	12.0	14.0	19.0	13.5	16.0	7.5	6.5	7.5	10.0	8.5	9.0
5	17.5	13.5	15.0	19.0	15.0	18.0	8.0	6.5	7.5	---	---	---
6	17.0	14.5	15.5	17.5	13.0	15.0	8.0	5.5	7.5	---	---	---
7	16.5	14.5	15.5	14.0	11.0	12.5	6.0	2.5	4.5	---	---	---
8	18.0	14.0	15.5	12.0	9.0	10.5	5.5	2.0	3.5	---	---	---
9	17.5	14.5	15.5	11.5	8.5	9.5	6.0	2.5	4.0	---	---	---
10	17.5	14.5	16.0	11.5	8.5	10.0	5.5	2.0	4.0	---	---	---
11	17.0	15.0	16.0	12.5	10.0	11.5	6.5	4.5	5.5	---	---	---
12	17.0	14.5	16.0	12.5	8.5	10.0	6.5	3.5	5.5	---	---	---
13	16.0	13.5	15.0	10.0	7.0	8.5	8.0	5.0	6.5	---	---	---
14	16.0	12.0	14.0	10.0	6.0	7.5	9.0	5.5	7.5	---	---	---
15	15.5	12.5	14.0	8.5	3.5	6.5	11.0	7.5	8.5	---	---	---
16	17.5	13.5	15.5	10.5	7.0	9.0	11.0	8.0	9.5	---	---	---
17	18.0	15.0	16.0	9.5	6.5	7.5	12.5	9.0	11.5	---	---	---
18	19.0	17.0	18.0	8.0	5.0	6.5	13.0	9.0	11.0	---	---	---
19	20.0	18.0	19.0	9.5	7.0	8.0	13.0	9.5	11.5	---	---	---
20	20.5	18.5	19.5	7.0	4.5	6.0	13.5	12.5	13.0	---	---	---
21	20.5	18.5	20.0	6.0	2.0	4.5	15.0	13.0	14.0	---	---	---
22	21.0	19.0	20.0	6.0	3.0	4.5	14.0	11.5	13.0	---	---	---
23	21.5	20.0	20.5	6.5	3.0	4.5	13.0	8.5	11.5	---	---	---
24	22.0	20.0	20.5	6.5	3.5	5.0	11.5	9.0	10.5	---	---	---
25	21.0	19.0	20.5	6.5	2.5	5.0	12.5	8.5	11.5	---	---	---
26	21.0	18.5	20.0	7.0	3.5	5.0	11.0	9.0	10.5	---	---	---
27	21.0	17.0	19.5	7.5	4.0	6.0	11.0	8.5	10.5	---	---	---
28	21.5	20.5	21.0	11.0	6.5	8.5	11.0	9.0	10.5	---	---	---
29	22.0	21.0	21.5	8.5	6.5	7.5	12.5	8.0	10.5	---	---	---
30	21.5	21.0	21.5	8.0	5.0	6.5	12.5	10.5	11.5	---	---	---
31	21.5	19.0	21.0	---	---	---	12.0	10.0	11.0	4.0	3.0	3.5
MONTH	22.0	11.5	17.5	21.5	2.0	9.5	15.0	2.0	9.0	13.5	3.0	9.5

PAMLICO RIVER BASIN

02083500 TAR RIVER AT TARBORO, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.5	4.0	4.0	11.0	10.0	10.5	19.5	17.5	18.5	21.5	18.5	20.0
2	5.0	4.5	4.5	11.0	10.0	10.5	18.5	16.0	17.5	21.5	19.0	20.0
3	4.5	4.0	4.0	12.0	10.5	11.0	17.0	14.5	16.0	20.5	16.5	18.5
4	4.5	4.0	4.0	11.0	11.0	11.0	17.5	14.5	16.0	19.0	15.5	17.0
5	4.0	4.0	4.0	12.5	11.0	12.0	18.0	15.5	17.0	20.0	16.0	17.5
6	4.0	4.0	4.0	12.5	11.5	12.5	19.5	17.0	18.0	20.5	16.5	18.0
7	4.0	3.5	4.0	12.0	11.0	11.5	19.0	17.0	18.0	21.5	17.0	19.5
8	4.0	3.5	3.5	12.0	10.5	11.5	18.0	15.5	17.0	20.0	18.0	19.0
9	3.0	2.5	3.0	13.0	11.5	12.5	17.0	14.0	15.5	19.5	17.0	18.5
10	3.0	2.0	2.5	13.5	12.0	13.0	15.0	12.5	14.0	21.0	17.0	19.0
11	3.5	2.0	2.5	13.0	12.0	12.0	15.0	12.0	13.5	21.0	18.5	20.0
12	4.5	3.5	4.0	14.0	12.0	12.5	17.5	13.5	15.5	21.5	19.0	20.5
13	4.5	4.0	4.5	14.0	12.0	13.0	18.0	14.5	16.0	23.0	19.0	21.0
14	4.0	3.5	4.0	14.0	12.5	13.5	17.5	16.0	17.0	24.5	21.0	22.5
15	5.0	4.0	4.5	14.5	13.0	13.5	17.5	16.0	17.0	23.5	21.5	22.5
16	5.0	4.0	4.5	13.5	12.5	13.0	18.0	16.0	17.0	23.5	20.5	22.0
17	5.0	4.0	4.5	12.5	12.0	12.5	18.0	15.5	17.0	---	---	---
18	5.5	4.0	4.5	13.0	11.0	12.0	18.5	15.5	17.0	---	---	---
19	6.0	4.5	5.0	12.0	10.0	11.0	19.5	16.5	18.0	---	---	---
20	6.5	6.0	6.0	12.0	10.0	11.0	20.5	17.0	19.0	---	---	---
21	6.5	5.5	6.0	12.0	10.5	11.5	22.0	18.5	20.5	---	---	---
22	7.0	6.0	6.5	11.0	10.5	10.5	22.5	19.0	20.5	---	---	---
23	8.5	7.0	7.5	10.5	10.5	10.5	23.0	19.5	21.5	---	---	---
24	11.0	8.5	9.5	10.5	10.0	10.0	22.5	19.5	21.0	---	---	---
25	12.0	11.0	11.5	10.5	10.0	10.5	23.5	20.0	21.5	---	---	---
26	12.0	11.5	12.0	11.0	10.0	10.5	23.0	20.0	21.5	---	---	---
27	12.5	11.0	12.0	12.0	10.5	11.0	22.5	19.5	21.5	---	---	---
28	12.0	11.0	11.5	14.5	12.0	13.0	23.5	20.5	22.0	---	---	---
29	---	---	---	17.0	14.0	15.5	23.0	21.0	22.0	24.0	23.5	24.0
30	---	---	---	18.5	15.5	17.0	21.0	18.5	20.0	24.5	22.0	23.0
31	---	---	---	19.0	16.5	18.0	---	---	---	25.0	22.5	24.0
MONTH	12.5	2.0	5.5	19.0	10.0	12.0	23.5	12.0	18.0	25.0	15.5	20.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.0	24.0	25.5	24.0	22.0	23.0	25.0	24.5	25.0	26.0	24.5	25.5
2	27.0	24.5	26.0	24.5	22.5	23.5	24.5	24.0	24.5	26.0	24.5	25.5
3	27.5	25.0	26.5	25.5	23.0	24.5	24.0	23.0	23.5	27.0	24.5	25.5
4	27.5	25.5	26.5	25.0	23.5	24.0	23.5	22.5	23.0	27.5	25.0	26.5
5	28.5	24.5	26.5	25.0	23.0	24.0	23.0	22.0	22.5	27.5	25.5	26.5
6	26.5	24.5	26.0	26.0	24.5	25.0	23.5	22.5	23.0	28.0	26.0	27.0
7	25.5	24.5	25.0	27.0	25.0	26.0	24.5	23.0	24.0	28.0	26.0	27.5
8	27.0	24.0	25.5	27.5	25.5	26.5	24.5	24.0	24.5	29.0	26.5	27.5
9	27.5	25.0	26.5	28.5	26.0	27.0	25.5	23.5	24.5	29.0	27.0	28.0
10	28.5	26.0	27.0	29.0	26.0	27.5	26.5	24.5	25.5	29.0	27.0	28.0
11	28.0	26.5	27.5	26.5	23.5	25.5	27.0	25.0	26.0	28.0	26.5	27.5
12	27.5	26.0	26.5	27.0	25.5	26.0	27.0	25.5	26.5	26.0	24.5	25.5
13	26.0	24.5	25.5	27.0	25.5	26.0	28.0	26.0	27.0	24.0	21.5	23.0
14	25.5	22.5	24.0	27.5	26.0	26.5	27.5	26.5	27.0	21.5	19.5	20.5
15	25.0	22.5	24.0	28.0	26.0	27.0	28.5	27.0	27.5	21.5	19.0	20.0
16	24.0	22.5	23.0	28.0	27.0	27.5	28.0	26.5	27.5	21.5	19.0	20.0
17	25.5	22.5	24.0	27.0	26.0	26.5	27.5	26.5	27.0	22.0	19.0	20.5
18	26.0	24.0	25.0	27.5	25.5	26.5	26.5	25.5	26.0	22.5	19.0	21.0
19	26.0	24.5	25.5	27.5	25.5	26.5	26.0	25.5	25.5	23.0	19.5	21.5
20	26.0	24.5	25.5	28.0	26.0	27.0	26.0	25.0	25.5	24.0	21.0	22.5
21	25.5	23.5	24.5	29.5	26.5	28.0	25.5	24.5	25.0	24.0	21.5	22.5
22	25.5	23.5	24.5	29.5	27.0	28.0	25.0	24.5	24.5	23.0	21.5	22.0
23	25.5	23.5	24.5	27.5	26.5	27.0	25.0	24.0	24.5	22.5	21.0	21.5
24	27.0	24.5	25.5	26.5	25.5	26.0	24.5	23.0	24.0	23.5	21.0	22.5
25	27.5	25.0	26.5	26.0	23.5	24.5	25.0	23.0	24.0	23.0	22.0	22.5
26	27.5	25.5	26.5	25.0	24.0	24.5	25.0	23.5	24.5	22.0	21.0	21.5
27	25.5	23.5	25.0	25.5	24.5	25.0	26.0	24.5	25.0	22.0	20.5	21.0
28	26.5	23.5	25.0	25.5	24.5	25.0	25.5	25.0	25.0	21.0	20.0	20.5
29	25.5	24.0	25.0	24.5	24.0	24.5	26.0	24.5	25.5	20.5	19.0	19.5
30	25.0	24.0	24.5	25.0	24.5	24.5	26.5	25.0	25.5	20.0	18.5	19.0
31	---	---	---	24.5	24.5	24.5	26.5	25.0	25.5	---	---	---
MONTH	28.5	22.5	25.5	29.5	22.0	25.5	28.5	22.0	25.0	29.0	18.5	23.5
YEAR	29.5	2.0	17.5									

02083500 TAR RIVER AT TARBORO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/16	1030	WATER	0	2.36	367	98	7.50	18.0	3.5	9.0	50
84/11/16	1045	WATER	0	2.58	432	80	7.30	14.0	4.7	11.6	20
84/12/04	1010	WATER	0	3.96	923	65	7.60	10.0	8.4	9.8	340
85/01/14	1030	WATER	0	5.82	1714	49		4.0		12.0	80
85/02/21	1220	WATER	0	8.06	2850	50	7.20	6.0	34.0	11.7	130
85/03/06	1050	WATER	0	6.79	2190	60	6.80	12.0		9.3	70
85/04/16	1140	WATER	0	3.69	815	81	7.10	18.0		8.5	30
85/05/13	1200	WATER	0	2.74	482	100	7.10	21.0	3.6	7.0	10
85/06/18	1115	WATER	0	3.10	596	87	6.90	24.0		6.6	110
85/07/16	1100	WATER	0	3.08	590	90	6.90	26.0		6.4	50
85/08/28	1310	WATER	0.1	4.78	1250	75	7.00	24.0	17.0	7.5	170
85/09/10	1200	WATER	0.1	2.24	312	100	7.10	26.0		7.8	60

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/16	1030	WATER	0	36	4	110	.70	.020	.300	.130	.070
84/11/16	1045	WATER	0	44	1K	98	.61	.040	.300	.150	.090
84/12/04	1010	WATER	0	35	12	120	.48	.040	.300	.180	.090
85/01/14	1030	WATER	0		11	110					
85/02/21	1220	WATER	0	105	15	100	.43	.100	.500	.100	.020
85/03/06	1050	WATER	0	25	13	110					
85/04/16	1140	WATER	0	36	8	98					
85/05/13	1200	WATER	0	210	5	110	.68	.120	.400	.170	.080
85/06/18	1115	WATER	0	19	33	130					
85/07/16	1100	WATER	0	24	20	110					
85/08/28	1310	WATER	0.1	21	16	100	.39	.040	.400	.160	.060
85/09/10	1200	WATER	0.1	30	1	110					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/16	1045	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	1220	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/28	1310	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PAMLICO RIVER BASIN

02083800 CONETOE CREEK NEAR BETHEL, NC

LOCATION.--Lat 35°46'33", long 77°27'45", Pitt County, Hydrologic Unit 03020103, on right bank 5 ft downstream from bridge on Secondary Road 1409, 5.5 mi downstream from Crisp Creek, and 5.5 mi west of Bethel.

DRAINAGE AREA.--78.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1956 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in the last table were provided by the North Carolina Department of Natural Resources and Community Develpoment.

AVERAGE DISCHARGE.--28 years (1958-85), 82.2 ft^3/s, 14.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,580 ft^3/s Aug. 23, 1967, gage height, 15.74 ft; minimum, 0.40 ft^3/s Aug. 28, 29, Sept. 3, 1980, gage height, 0.07 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1955 reached a stage of 16.7 ft, from information by local resident (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 470 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	0200	625	9.71	Aug. 3	0100	*691	*10.24

Minimum discharge, 4.9 ft^3/s, July 10, gage height, 0.38 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	11	8.8	8.9	190	60	28	9.3	7.4	7.8	74	17
2	36	11	8.0	8.9	284	75	25	9.1	7.3	8.6	591	16
3	32	10	11	12	321	71	24	10	6.9	8.2	557	15
4	30	10	13	47	194	63	23	11	6.7	7.3	213	14
5	27	10	11	81	160	61	21	9.6	7.9	6.8	126	13
6	25	10	15	54	257	56	21	9.2	42	6.5	93	13
7	23	9.5	17	44	233	50	21	8.9	14	6.3	74	12
8	22	9.3	14	38	168	49	20	8.4	11	6.1	69	11
9	21	e9.3	14	32	134	47	19	8.1	9.3	5.9	125	10
10	20	e8.9	13	29	114	44	19	8.2	8.4	5.3	79	10
11	19	e8.9	13	30	102	41	19	8.2	12	83	61	10
12	19	e8.7	13	28	381	41	18	9.3	11	30	49	9.8
13	18	e8.7	13	26	550	38	18	15	11	176	41	9.4
14	17	e8.5	12	25	298	36	18	36	10	59	36	9.2
15	17	e8.2	12	23	202	34	19	17	8.0	31	32	9.1
16	16	e8.2	11	21	161	32	19	13	9.9	23	28	8.7
17	15	7.9	11	23	135	33	19	22	30	87	27	8.7
18	15	7.8	11	34	117	32	16	14	18	30	27	7.8
19	15	8.0	11	34	106	29	16	11	44	18	39	7.5
20	15	7.7	11	32	101	28	16	9.8	18	14	36	7.8
21	14	7.6	11	26	97	27	15	9.5	14	11	30	7.5
22	13	7.4	11	25	89	32	14	10	12	9.0	36	7.7
23	13	7.6	10	24	84	48	12	9.9	11	8.2	27	8.5
24	13	7.7	10	24	80	46	12	13	9.8	7.6	23	8.5
25	13	7.6	9.9	24	76	47	12	11	9.1	9.9	27	7.9
26	13	7.4	9.8	23	71	42	11	9.8	8.6	31	55	8.4
27	12	7.4	9.3	21	68	38	10	8.8	7.9	23	29	225
28	12	7.9	9.4	22	62	36	10	8.5	6.9	47	24	125
29	12	9.4	9.5	23	---	34	10	8.1	6.5	375	21	59
30	11	11	9.5	23	---	31	9.9	7.8	6.8	202	20	42
31	11	---	9.1	65	---	29	---	7.6	---	95	19	---
TOTAL	573	262.6	351.3	930.8	4835	1330	514.9	351.1	385.4	1438.5	2688	718.5
MEAN	18.5	8.75	11.3	30.0	173	42.9	17.2	11.3	12.8	46.4	86.7	23.9
MAX	36	11	17	81	550	75	28	36	44	375	591	225
MIN	11	7.4	8.0	8.9	62	27	9.9	7.6	6.5	5.3	19	7.5
CFSM	.24	.11	.14	.38	2.22	.55	.22	.14	.16	.59	1.11	.31
IN.	.27	.13	.17	.44	2.30	.63	.25	.17	.18	.69	1.28	.34

CAL YR 1984 TOTAL 31937.2 MEAN 87.3 MAX 733 MIN 6.4 CFSM 1.12 IN. 15.21
WTR YR 1985 TOTAL 14379.1 MEAN 39.4 MAX 591 MIN 5.3 CFSM .50 IN. 6.85

e Estimated

02083800 CONETOE CREEK NEAR BETHEL, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
85/01/24	1330	WATER	0	1.29	24			4.0	4.6	12.5	10K
85/02/27	1600	WATER	0	2.20	67			12.0		9.4	10K
85/03/12	1530	WATER	0	1.62	40			13.0		9.1	10K
85/04/23	1530	WATER	0	.78	12			19.0	6.4	8.4	80
85/05/23	1015	WATER	0	.68	10	148		19.0		7.4	160
85/06/27	0930	WATER	0	.54	8			18.0		7.7	50
85/07/02	1350	WATER	0	.57	9						
85/07/29	1130	WATER	0	7.54	413	61	5.60	24.0	110.0	5.8	6800
85/07/30	1600	WATER	0	3.74	151			22.0	41.0	6.7	300
85/09/17	1430	WATER	0.1	.67	9	151	7.00	17.0		9.3	80

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/24	1330	WATER	0		1	100	2.50	.040	.300	.040	.010K
85/02/27	1600	WATER	0		6	120					
85/03/12	1530	WATER	0		6	120					
85/04/23	1530	WATER	0		4	140	1.60	.140	.600	.090	.010K
85/05/23	1015	WATER	0		6	120					
85/06/27	0930	WATER	0		5	150					
85/07/29	1130	WATER	0	5	79	190	1.00	.090	1.000	.260	.060
85/07/30	1600	WATER	0		34	150	2.10	.200	.600	.100	.030
85/09/17	1430	WATER	0.1	17	3	120					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/24	1330	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	1530	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/29	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	40
85/07/30	1600	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02084070 GREEN MILL RUN AT ARLINGTON BOULEVARD AT GREENVILLE, NC

LOCATION.--Lat 35°35'28", long 78°22'17", Pitt County, Hydrologic Unit 03020103, on right bank on downstream side of culvert on Arlington Boulevard, 0.1 mi west of Evans Street, 0.2 mi east of Seaboard Coast Line Railroad, 1.0 mi north of U.S. Highway 64 Bypass, and 3.6 mi upstream from mouth.

DRAINAGE AREA.--9.1 mi².

PERIOD OF RECORD.--March 1980 to September 1985 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 27.12 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good above 1.0 ft³/s and fair below. Recording rain gage at station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--5 years, 12.4 ft³/s, 18.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 864 ft³/s Aug. 12, 1981, gage height, 10.56 ft; minimum, 0.45 ft³/s Sept. 11, 1983, gage height, 2.12 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 4	1500	108	5.36	Aug. 2	0330	326	7.54
Feb. 6	1000	137	5.83	Aug. 8	1900	254	6.98
Feb. 12	0945	*398	*8.10	Sept. 27	0230	239	6.85

Minimum discharge, 0.61 ft³/s July 20, 21, 22; minimum gage height, 2.07 ft June 14, 15, 26, 27, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	2.1	2.1	2.1	15	12	3.8	1.6	.99	11	20	2.8
2	4.4	2.1	2.0	2.2	42	11	3.5	1.6	.95	3.5	122	2.0
3	3.7	2.4	9.5	15	22	9.2	3.4	3.6	.94	1.8	10	1.8
4	3.3	4.4	3.2	61	14	8.1	3.2	2.1	1.1	4.0	4.6	1.7
5	2.9	3.5	7.9	18	29	7.8	3.2	1.8	3.6	4.1	3.1	1.6
6	2.7	2.3	7.1	8.3	91	6.8	5.5	1.7	5.3	6.1	2.4	1.5
7	2.6	2.0	3.4	6.5	32	6.3	3.1	1.6	1.5	3.6	2.0	1.5
8	2.5	2.0	2.9	5.5	22	6.4	3.0	1.6	1.3	1.7	81	1.4
9	2.4	2.0	2.7	4.7	17	6.2	2.9	1.6	1.1	1.1	36	1.4
10	2.2	2.0	2.5	8.7	14	5.8	2.8	2.2	.99	1.3	26	1.4
11	2.2	2.1	2.6	7.8	13	5.7	3.1	1.8	.92	37	8.7	1.4
12	2.1	2.0	2.4	5.6	196	5.7	2.9	1.7	.83	3.7	4.9	1.5
13	2.2	1.9	2.4	4.8	47	5.3	2.8	1.6	.87	2.0	3.6	1.4
14	2.2	1.7	2.5	4.5	27	5.3	3.0	1.6	.76	1.4	2.7	1.2
15	2.3	1.8	2.4	4.1	21	5.1	3.4	1.4	.76	1.2	2.4	1.2
16	2.1	2.0	2.4	3.6	17	5.1	4.2	1.3	12	1.1	3.3	1.2
17	2.1	1.8	2.4	9.9	14	7.0	3.7	1.6	5.3	1.5	6.1	1.0
18	2.7	1.9	2.4	6.9	12	5.5	2.8	1.4	2.9	1.1	35	.95
19	2.5	5.1	2.3	5.4	12	5.0	2.7	1.2	3.2	.82	19	.96
20	2.3	2.7	2.5	5.1	16	4.9	2.5	1.2	2.3	.75	7.2	.97
21	2.1	2.0	2.5	6.3	13	4.5	2.4	1.5	1.1	.69	4.9	.84
22	2.1	1.9	2.4	4.1	11	18	2.3	1.9	1.0	.69	17	8.2
23	2.1	1.8	2.2	3.5	11	8.4	2.1	2.7	.97	3.3	5.7	3.7
24	2.2	1.8	2.1	3.6	9.9	6.5	2.1	4.0	.92	2.2	5.4	1.2
25	2.1	1.7	2.1	3.7	9.3	6.2	2.1	1.7	.88	25	4.9	1.0
26	2.3	1.7	2.0	3.3	8.9	5.1	2.0	1.3	.80	10	3.9	24
27	2.2	1.8	3.2	3.1	9.3	4.8	2.4	1.1	.78	10	2.9	105
28	2.2	5.9	2.3	4.6	8.0	4.6	2.2	1.0	.77	7.5	2.8	9.6
29	2.8	5.1	2.2	5.2	---	4.3	1.7	1.1	1.5	12	2.6	4.6
30	2.3	2.5	2.1	3.8	---	4.3	1.6	1.0	6.3	3.3	2.6	3.3
31	2.2	---	2.1	36	---	3.9	---	1.0	---	2.3	2.6	---
TOTAL	80.4	74.0	92.8	266.9	753.6	204.8	86.4	52.5	62.63	165.75	455.3	190.32
MEAN	2.59	2.47	2.99	8.61	26.9	6.61	2.88	1.69	2.09	5.35	14.7	6.34
MAX	6.4	5.9	9.5	61	196	18	5.5	4.0	12	37	122	105
MIN	2.1	1.7	2.0	2.1	8.0	3.9	1.6	1.0	.76	.69	2.0	.84
CFSM	.28	.27	.33	.95	2.96	.73	.32	.19	.23	.59	1.62	.70
IN.	.33	.30	.38	1.09	3.08	.84	.35	.21	.26	.68	1.86	.78

CAL YR 1984 TOTAL 6223.28 MEAN 17.0 MAX 342 MIN .73 CFSM 1.87 IN. 25.44
WTR YR 1985 TOTAL 2485.40 MEAN 6.81 MAX 196 MIN .69 CFSM .75 IN. 10.16

02084148 CHICOD CREEK AT SECONDARY ROAD 1565 NEAR GRIMESLAND, NC

LOCATION.--Lat 35°31'57", long 77°11'13", Pitt County, Hydrologic Unit 03020103, at bridge on Secondary Road 1565, 2.0 mi upstream from Cow Swamp and 2.2 mi south of Grimesland.

DRAINAGE AREA.--19 mi^2 .

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Station operated to define the effects of channelization on stream quantity and quality in the Chicod Creek basin.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
04...	1405	14	--	--	--	--	--	--	--	--	--
NOV											
14...	1130	.10	230	6.3	8.0	80	770	3.7	31	420	>2000
DEC											
18...	1250	1.4	--	--	--	--	--	--	--	--	--
FEB											
08...	0830	107	--	--	--	--	--	--	--	--	--
MAR											
26...	1455	12	--	--	--	--	--	--	--	--	--
APR											
12...	1110	.62	158	6.3	16.0	55	773	8.5	85	50	K570
JUL											
15...	1245	.66	120	5.7	25.0	70	759	5.8	71	K68	2300
25...	0940	11	--	--	--	--	--	--	--	--	--
25...	1340	16	93	5.5	21.5	70	695	4.3	54	--	--
AUG											
02...	1300	78	65	5.8	22.0	100	761	5.0	57	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	34	0	8.5	3.0	11	33	.9	11	2.7	20
DEC										
18...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	27	0	7.2	2.1	8.0	34	.7	5.9	9.0	13
JUL										
15...	26	21	7.0	2.1	6.0	28	.5	5.6	22	9.5
25...	--	--	--	--	--	--	--	--	--	--
25...	21	14	5.7	1.7	5.3	30	.5	4.2	20	9.1
AUG										
02...	18	11	5.0	1.4	3.2	24	.3	3.1	3.5	6.9

K Results based on colony count outside the acceptable range (non-ideal colony count).

PAMLICO RIVER BASIN

02084148 CHICOD CREEK AT SECONDARY ROAD 1565 NEAR GRIMESLAND, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	<.10	7.4	125	110	.17	.03	.66	.040	.70	.58
DEC										
18...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	.10	6.1	117	71	.16	.20	2.0	.100	2.1	2.1
JUL										
15...	<.10	8.0	96	64	.13	.17	1.3	.090	1.4	1.3
25...	--	--	--	--	--	--	--	--	--	--
25...	<.10	6.2	70	56	.10	2.9	.94	.060	1.0	1.0
AUG										
02...	<.10	5.9	57	34	.08	12	--	<.010	.90	.81

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	13	11	2.0	14	61	2.6	.310	.250	1	--
DEC										
18...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	5.1	.00	5.2	7.2	32	10	.240	.080	1	0
JUL										
15...	1.3	.40	.90	2.7	12	2.2	.190	.120	2	0
25...	--	--	--	--	--	--	--	--	--	--
25...	.90	--	--	1.9	8.4	--	.180	.170	1	0
AUG										
02...	.70	.30	.40	1.6	7.1	1.2	.070	.040	1	--

PAMLICO RIVER BASIN

02084146 CHICOD CREEK AT SECONDARY ROAD 1565 NEAR GRIMESLAND, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ARSENIC DISSOLVED (UG/L AS AS)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	<1	<1	--	1	2000	1300	720	2	0	2
DEC										
18...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	1	3	1	2	1400	760	640	3	0	3
JUL										
15...	2	4	0	7	840	370	470	4	2	2
25...	--	--	--	--	--	--	--	--	--	--
25...	1	5	0	6	980	780	200	4	1	3
AUG										
02...	<1	7	6	1	770	450	320	4	--	<1

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSMPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT									
04...	--	--	--	--	--	--	--	8	.29
NOV									
14...	.4	.1	.3	20	10	8	17	6	.00
DEC									
18...	--	--	--	--	--	--	--	6	.02
FEB									
08...	--	--	--	--	--	--	--	4	1.2
MAR									
26...	--	--	--	--	--	--	--	8	.26
APR									
12...	<.1	--	<.1	10	0	10	--	7	.01
JUL									
15...	.1	.0	.2	30	10	20	11	13	.02
25...	--	--	--	--	--	--	--	21	.64
25...	1.4	.5	.9	30	20	9	10	23	.96
AUG									
02...	.1	--	--	10	0	12	14	19	4.0

PAMLICO RIVER BASIN

02084158 COW SWAMP NEAR GRIMESLAND, NC

LOCATION.--Lat 35°32'00", long 77°13'30", Pitt County, Hydrologic Unit 03020103, at bridge on Secondary Road 1756, 1.0 mi upstream from mouth, and 3.0 mi southwest of Grimesland.

DRAINAGE AREA.--17 mi².

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Station operated to define the effects of channelization on stream quantity and quality in the Chicod Creek basin.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
04...	1540	8.8	--	--	--	--	--	--	--	--	--
NOV											
14...	1215	1.4	278	6.7	8.0	10	770	6.4	53	96	460
DEC											
18...	1340	3.3	--	--	--	--	--	--	--	--	--
FEB											
08...	0945	56	--	--	--	--	--	--	--	--	--
MAR											
26...	1320	8.7	--	--	--	--	--	--	--	--	--
APR											
12...	1025	3.1	299	6.6	14.0	25	773	6.9	66	58	K320
MAY											
08...	1000	.41	--	--	--	--	--	--	--	--	--
JUL											
15...	1220	.41	220	5.5	25.0	20	759	3.8	46	K72	280
25...	1030	.89	--	--	--	--	--	--	--	--	--
25...	1405	4.0	228	7.1	21.5	35	695	5.0	62	--	--
AUG											
02...	1230	162	90	5.8	22.5	150	762	5.7	66	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	95	6	33	3.0	9.8	17	.5	6.0	24	16
DEC										
18...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	91	19	32	2.8	8.2	16	.4	3.1	24	13
MAY										
08...	--	--	--	--	--	--	--	--	--	--
JUL										
15...	72	51	24	2.9	6.1	14	.3	6.8	29	18
25...	--	--	--	--	--	--	--	--	--	--
25...	73	0	25	2.6	7.1	16	.4	8.3	19	11
AUG										
02...	28	18	8.9	1.3	2.5	14	.2	5.2	14	4.7

K Results based on colony count outside the acceptable range (non-ideal colony count).

PAMLICO RIVER BASIN

02084158 COW SWAMP NEAR GRIMESLAND, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT 04...	--	--	--	--	--	--	--	--	--	--
NOV 14...	.20	12	166	160	.23	.63	1.5	.080	1.6	1.4
DEC 18...	--	--	--	--	--	--	--	--	--	--
FEB 08...	--	--	--	--	--	--	--	--	--	--
MAR 26...	--	--	--	--	--	--	--	--	--	--
APR 12...	.20	6.1	139	130	.19	1.2	.82	.080	.90	.99
MAY 08...	--	--	--	--	--	--	--	--	--	--
JUL 15...	.20	8.6	138	110	.19	.15	1.7	.150	1.8	1.7
25...	--	--	--	--	--	--	--	--	--	--
25...	.20	6.6	152	130	.21	1.6	1.7	.110	1.8	1.9
AUG 02...	.20	3.7	70	47	.10	31	1.2	.050	1.2	1.1

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)
OCT 04...	--	--	--	--	--	--	--	--	--	--
NOV 14...	4.4	1.6	2.8	6.0	27	4.2	.430	.290	<1	--
DEC 18...	--	--	--	--	--	--	--	--	--	--
FEB 08...	--	--	--	--	--	--	--	--	--	--
MAR 26...	--	--	--	--	--	--	--	--	--	--
APR 12...	1.4	.10	1.3	2.3	10	2.3	.310	.220	1	0
MAY 08...	--	--	--	--	--	--	--	--	--	--
JUL 15...	1.3	.20	1.1	3.1	14	2.8	.580	.470	3	1
25...	--	--	--	--	--	--	--	--	--	--
25...	3.2	.00	3.5	5.0	22	5.4	.900	.680	3	1
AUG 02...	1.6	.20	1.4	2.8	12	2.5	.530	.390	2	1

PAMLICO RIVER BASIN

02084158 COW SWAMP NEAR GRIMESLAND, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	<1	<1	--	<1	340	250	86	1	--	--
DEC										
18...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	1	9	7	2	670	500	170	4	--	2
MAY										
08...	--	--	--	--	--	--	--	--	--	--
JUL										
15...	2	4	0	4	700	480	220	4	1	3
25...	--	--	--	--	--	--	--	--	--	--
25...	2	4	0	4	1000	900	100	4	2	2
AUG										
02...	1	8	5	3	1500	1400	150	1	0	1

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-NPENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT									
04...	--	--	--	--	--	--	--	8	.19
NOV									
14...	<.1	--	<.1	10	--	<3	5.0	--	--
DEC									
18...	--	--	--	--	--	--	--	4	.04
FEB									
08...	--	--	--	--	--	--	--	8	1.2
MAR									
26...	--	--	--	--	--	--	--	9	.21
APR									
12...	<.1	--	<.1	60	50	10	--	6	.05
MAY									
08...	--	--	--	--	--	--	--	6	.00
JUL									
15...	.3	.0	.3	10	0	11	8.5	--	--
25...	--	--	--	--	--	--	--	360	.87
25...	.7	.4	.3	<10	--	9	10	60	.65
AUG									
02...	<.1	--	--	40	40	5	12	58	25

PAMLICO RIVER BASIN

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC

LOCATION.--Lat 35°33'47", long 77°13'43", Pitt County, Hydrologic Unit 03020103, on left bank at downstream side of bridge on Secondary Road 1760, 0.6 mi upstream from Juniper Branch, and 2.6 mi east-southeast of Simpson.

DRAINAGE AREA.--45 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is National Geodetic Vertical Datum of 1929 (Soil Conservation Service bench mark). Prior to July 25, 1977, at datum 4.92 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--10 years, 51.2 ft³/s, 15.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,660 ft³/s Sept. 14, 1984, gage height, 12.48 ft; no flow at times during most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 3	0300	384	8.28	Aug. 19	1900	315	8.08
Feb. 6	1930	*591	*8.84	Sept. 27	2000	492	8.58
Feb. 12	2330	335	8.14				

No flow May 29-31, June 1-6, 9-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	3.1	4.6	5.2	163	33	11	1.4	.00	1.2	12	3.7
2	57	3.0	4.2	5.2	206	42	9.3	1.4	.00	2.2	188	3.1
3	43	2.5	6.5	18	327	40	8.3	1.4	.00	.67	138	2.7
4	29	3.1	7.3	85	186	34	7.8	1.4	.00	.31	58	2.2
5	17	6.6	8.4	154	134	31	7.4	1.2	.00	.13	23	1.8
6	12	4.2	15	91	416	27	6.7	1.0	.00	1.4	9.8	1.5
7	8.5	3.3	11	62	405	21	6.1	.75	.02	5.6	6.2	1.4
8	7.2	3.1	8.6	48	213	18	5.5	.38	.01	2.1	5.2	1.2
9	6.2	3.0	7.6	36	137	16	5.2	.20	.00	.95	29	1.1
10	5.1	3.0	7.1	34	103	14	4.8	.23	.00	.64	36	1.1
11	4.3	3.0	6.9	71	86	13	4.7	.58	.00	35	37	1.1
12	3.8	3.0	6.6	70	176	13	4.6	1.1	.00	58	14	.97
13	3.5	2.7	6.3	57	267	12	4.3	.90	.00	20	7.7	.89
14	3.3	2.5	6.3	47	161	12	4.3	.78	.00	6.6	5.0	.76
15	3.1	2.4	6.1	38	113	11	4.7	.97	.00	3.8	3.6	.78
16	3.0	2.6	5.8	29	90	9.8	5.4	.61	.00	3.0	2.9	1.0
17	2.9	2.5	5.7	33	74	11	13	.58	.00	4.0	18	1.1
18	2.9	2.4	5.6	55	63	11	7.2	.49	.00	6.1	27	1.1
19	3.0	3.1	5.5	55	56	9.2	5.2	.31	.00	4.4	200	1.0
20	3.0	3.7	5.5	48	59	8.5	4.3	.14	.00	1.7	178	1.0
21	2.8	3.5	5.8	e40	72	8.2	3.7	.12	.00	1.4	76	.88
22	2.4	3.4	5.8	e33	70	26	3.4	.45	.00	1.2	69	1.1
23	2.2	3.5	5.5	e27	63	61	3.0	.71	.00	1.2	83	1.8
24	2.0	3.7	5.3	23	56	53	2.7	.91	.00	.94	50	1.7
25	2.0	3.7	5.2	24	50	38	2.7	1.1	.00	7.8	35	1.4
26	2.4	3.7	5.0	21	44	29	2.2	.76	.00	35	56	2.7
27	2.9	3.7	5.1	14	40	24	1.9	.23	.00	33	20	293
28	2.9	5.0	5.4	15	36	19	1.7	.04	.00	18	9.8	375
29	3.3	9.5	5.4	21	---	14	1.7	.00	.00	13	7.0	176
30	3.3	5.7	5.4	23	---	13	1.5	.00	.00	17	5.2	86
31	3.3	---	5.2	65	---	12	---	.00	---	12	4.2	---
TOTAL	308.3	108.2	199.7	1347.4	3866	683.7	154.3	20.14	.03	298.34	1413.6	969.08
MEAN	9.95	3.61	6.44	43.5	138	22.1	5.14	.65	.00	9.62	45.6	32.3
MAX	61	9.5	15	154	416	61	13	1.4	.02	58	200	375
MIN	2.0	2.4	4.2	5.2	36	8.2	1.5	.00	.00	.13	2.9	.76
CFSM	.22	.08	.14	.97	3.07	.49	.11	.01	.00	.21	1.01	.72
IN.	.25	.09	.17	1.11	3.20	.57	.13	.02	.00	.25	1.17	.80

CAL YR 1984 TOTAL 25969.39 MEAN 71.0 MAX 1980 MIN .04 CFSM 1.58 IN. 21.47
WTR YR 1985 TOTAL 9368.79 MEAN 25.7 MAX 416 MIN .00 CFSM .57 IN. 7.74

e Estimated

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1975 to current year.
WATER TEMPERATURE: November 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: November 1975 to current year.

INSTRUMENTATION.--Water-quality monitor and sediment pumping sampler since November 1975.

REMARKS.--No flow May 29, 30, 31, June 1-6, 9-30. Station operated to define the effects of channelization on stream quantity and quality in the Chicod Creek basin. Interruptions in the daily record were due to malfunctions of the instrument.

COOPERATION.--Chemical and biological data shown in the last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, ≥508 microsiemens July 6, Aug. 14, 1985; minimum, 30 microsiemens May 5, 1978.
WATER TEMPERATURE: Maximum, 32.0°C June 15, 16, 1981; minimum, 0.0°C Dec. 20, 1975, Jan. 10, 11, 18-25, 1976, Jan. 5, 6, 9, 11, 1981, Jan. 20, 1983, Jan. 22, 1984, Jan. 21, 22, 23, 24, 27, 1985.
SEDIMENT CONCENTRATION: Maximum daily mean, 662 mg/L May 5, 1978; minimum daily mean, 0 mg/L during periods of no flow.
SEDIMENT LOAD: Maximum daily, 3,650 tons May 5, 1978; minimum daily, 0.0 tons during periods of no flow.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, ≥508 microsiemens July 6, Aug.14; minimum, 36 microsiemens Feb. 6.
WATER TEMPERATURE: Maximum recorded, 27.0°C July 15; minimum, 0.0°C Jan. 21, 22, 23, 24, 27.
SEDIMENT CONCENTRATION: Maximum daily mean, 170 mg/L July 11; minimum daily mean, 0 mg/L during periods of no flow.
SEDIMENT LOAD: Maximum daily, 80 tons Sept. 27; minimum daily, 0.0 tons during periods of no flow.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
03...	1530	41	95	5.9	15.0	45	761	9.0	89	--	--
NOV											
14...	1000	2.4	251	6.6	8.0	30	772	4.6	38	K40	560
DEC											
17...	1330	6.2	210	6.3	12.0	30	767	7.8	72	K32	K52
FEB											
06...	1100	426	100	6.6	4.5	95	756	12.0	93	K1200	--
MAR											
26...	1230	29	125	6.3	10.5	40	770	10.2	90	K68	K44
APR											
12...	0840	4.7	202	6.3	12.5	5	774	5.5	51	100	K430
MAY											
29...	1100	.20	320	6.0	21.0	40	756	4.8	54	160	K16
JUL											
15...	1045	5.9	180	5.9	24.5	150	759	4.0	48	110	K1500
25...	1430	8.2	214	6.8	21.0	150	695	3.6	44	--	--
AUG											
02...	1145	193	130	5.9	22.0	100	764	5.7	65	--	--
SEP											
04...	1045	2.4	180	6.2	24.0	45	765	6.4	76	96	K700

K Results based on colony count outside the acceptable range (non-ideal colony count).

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT										
03...	29	19	8.6	1.8	4.8	24	.4	2.8	12	11
NOV										
14...	78	27	26	3.2	11	21	.6	8.6	18	18
DEC										
17...	67	11	22	2.9	9.4	21	.5	7.2	16	15
FEB										
06...	27	14	8.0	1.8	3.8	20	.3	4.2	13	9.9
MAR										
26...	36	20	11	2.0	6.2	25	.5	3.0	13	11
APR										
12...	69	16	23	2.9	8.1	19	.4	4.5	17	13
MAY										
29...	110	8	35	5.4	8.9	14	.4	6.3	8.8	11
JUL										
15...	46	37	14	2.8	7.5	22	.5	9.3	31	11
25...	37	0	11	2.2	9.0	26	.7	14	17	13
AUG										
02...	37	31	11	2.2	4.3	17	.3	6.6	22	7.6
SEP										
04...	61	18	20	2.7	7.5	20	.4	4.9	18	13

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT										
03...	<.10	8.4	80	56	.11	8.9	1.1	.030	1.1	1.0
NOV										
14...	.20	9.8	150	130	.20	.97	4.2	.130	4.3	3.9
DEC										
17...	.10	7.9	145	110	.20	2.4	1.9	.070	2.0	1.9
FEB										
06...	<.10	4.9	89	54	.12	102	1.2	.090	1.3	1.3
MAR										
26...	<.10	6.0	102	62	.14	8.0	1.2	.040	1.2	1.2
APR										
12...	.10	5.4	121	110	.16	1.5	2.5	.130	2.6	2.7
MAY										
29...	.30	6.6	164	140	.22	.09	.48	.020	.50	.36
JUL										
15...	.10	8.5	151	91	.21	2.4	2.1	.330	2.4	2.6
25...	.20	6.6	141	100	.19	3.1	1.7	.020	1.7	1.7
AUG										
02...	.10	5.8	95	64	.13	50	2.4	.100	2.5	2.4
SEP										
04...	<.10	9.4	122	100	.17	.79	1.9	.010	1.9	1.9

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)
OCT										
03...	.70	.00	.70	1.8	8.0	1.7	.200	.100	1	0
NOV										
14...	2.6	.00	2.7	6.9	31	6.6	.410	.400	1	0
DEC										
17...	3.5	.40	3.1	5.5	24	5.0	.460	.390	1	--
FEB										
06...	1.6	.00	1.7	2.9	13	3.0	.340	.310	2	1
MAR										
26...	1.1	.10	1.0	2.3	10	2.2	.410	.200	1	0
APR										
12...	1.1	.00	1.3	3.7	16	4.0	.360	.250	1	0
MAY										
29...	1.6	--	--	2.1	9.3	--	.400	.340	2	0
JUL										
15...	3.4	.40	3.0	5.8	26	5.6	.720	.630	2	0
25...	7.5	.00	7.5	9.2	41	9.2	1.20	1.00	2	0
AUG										
02...	2.7	--	--	5.2	23	--	.800	.700	1	0
SEP										
04...	.80	.00	.80	2.7	12	2.7	.570	.500	2	0

DATE	ARSENIC DISSOLVED (UG/L AS AS)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
OCT										
03...	1	2	1	1	690	460	230	6	--	<1
NOV										
14...	1	3	2	1	570	240	330	5	2	3
DEC										
17...	<1	2	0	2	630	300	330	6	2	4
FEB										
06...	1	2	0	2	1300	1100	160	5	3	2
MAR										
26...	1	5	0	7	630	350	280	6	2	4
APR										
12...	1	5	3	2	880	570	310	4	2	2
MAY										
29...	2	4	1	3	160	0	160	6	3	3
JUL										
15...	2	6	0	7	780	410	370	5	2	3
25...	2	4	0	4	1000	680	320	4	1	3
AUG										
02...	1	9	3	6	2000	1700	310	1	--	<1
SEP										
04...	2	3	0	3	650	350	300	1	0	1

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSMPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT							
03...	<.1	--	<.1	10	0	11	10
NOV							
14...	.4	--	<.1	30	20	15	7.5
DEC							
17...	.7	.6	.1	20	--	--	8.5
FEB							
06...	.7	.5	.2	40	20	19	11
MAR							
26...	<.1	--	<.1	50	10	36	8.5
APR							
12...	<.1	--	<.1	20	0	19	--
MAY							
29...	.1	--	--	40	20	20	6.3
JUL							
15...	<.1	--	--	20	0	17	13
25...	.3	.0	.3	30	20	6	15
AUG							
02...	<.1	--	.1	40	20	17	17
SEP							
04...	<.1	--	<.1	30	20	11	9.3

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	224	215	219	283	274	279	193	191	192
2	---	---	---	230	225	227	281	274	277	194	191	193
3	---	---	---	233	229	231	280	253	267	194	182	192
4	---	---	---	233	202	225	282	271	277	198	180	188
5	---	---	---	253	196	224	287	252	270	181	161	171
6	---	---	---	246	223	236	275	253	271	163	158	160
7	---	---	---	259	243	249	308	272	297	162	158	160
8	---	---	---	260	247	253	308	267	287	162	159	160
9	275	138	204	250	242	247	265	248	254	160	159	159
10	144	139	142	246	237	241	246	223	236	160	158	159
11	149	143	146	239	224	234	222	208	214	161	158	160
12	153	149	151	222	218	220	207	204	206	162	161	161
13	159	152	156	445	218	221	204	200	202	161	154	160
14	161	158	159	258	246	251	204	201	203	159	153	156
15	167	161	165	253	248	251	206	203	204	155	151	153
16	175	167	172	254	246	250	208	205	207	154	152	153
17	179	174	177	253	248	250	208	204	206	154	152	153
18	182	177	180	250	243	246	213	207	210	157	154	155
19	186	182	183	243	233	238	213	209	212	157	151	154
20	189	186	187	250	232	236	212	211	212	151	134	147
21	191	185	189	254	247	250	214	212	213	137	131	135
22	195	189	192	252	246	248	217	214	215	141	138	140
23	200	191	194	252	247	249	220	217	218	145	142	143
24	204	195	200	250	246	249	222	220	221	148	145	147
25	205	201	202	252	250	251	224	220	221	150	148	149
26	208	204	206	254	251	252	224	221	222	153	151	152
27	210	206	208	253	248	250	221	218	219	155	153	154
28	211	203	207	254	226	250	218	213	216	157	155	156
29	204	191	199	268	219	243	213	202	208	160	158	158
30	230	192	210	273	244	252	202	195	198	162	160	161
31	224	219	221	---	---	---	196	193	195	163	141	154
MONTH	275	138	185	445	196	241	308	193	230	198	131	159

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	149	136	145	128	121	124	159	146	154	276	255	265
2	138	124	130	137	128	133	164	154	159	276	250	265
3	136	104	117	140	123	130	169	152	159	288	262	277
4	107	105	106	123	120	122	163	157	158	281	260	273
5	112	107	110	131	123	127	163	158	161	273	254	268
6	112	36	96	160	130	149	200	162	186	279	268	275
7	82	76	78	157	136	142	194	182	189	278	271	274
8	89	82	85	144	135	138	201	192	196	---	---	---
9	92	84	88	143	140	142	204	199	201	---	---	---
10	96	86	91	148	141	144	199	196	198	---	---	---
11	99	90	95	149	142	145	202	196	198	---	---	---
12	103	91	98	154	149	151	203	199	201	---	---	---
13	89	86	87	161	152	156	204	194	199	---	---	---
14	91	88	90	162	156	158	223	205	214	---	---	---
15	112	92	106	164	155	158	231	224	229	---	---	---
16	106	96	100	167	157	165	239	228	232	---	---	---
17	105	97	101	166	161	164	252	218	239	---	---	---
18	108	100	104	166	163	165	249	244	248	---	---	---
19	116	105	110	169	164	167	248	235	241	---	---	---
20	123	109	114	181	168	176	245	230	238	---	---	---
21	124	114	118	175	173	173	255	231	240	---	---	---
22	114	107	110	187	176	182	257	243	251	---	---	---
23	113	111	112	186	154	174	268	251	258	---	---	---
24	114	111	113	151	131	139	278	265	272	---	---	---
25	115	114	114	133	127	129	293	280	287	---	---	---
26	118	115	116	133	122	127	296	274	285	---	---	---
27	123	118	122	137	126	131	292	269	280	---	---	---
28	124	121	122	138	130	133	275	266	273	---	---	---
29	---	---	---	139	135	137	283	275	280	---	---	---
30	---	---	---	144	137	141	282	270	276	---	---	---
31	---	---	---	147	141	144	---	---	---	---	---	---
MONTH	149	36	106	187	120	147	296	146	223	288	250	271

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	445	366	391	167	105	139	174	168	172
2	---	---	---	378	231	313	134	96	118	182	172	179
3	---	---	---	233	217	226	103	93	98	195	175	183
4	---	---	---	238	226	233	98	95	96	200	173	177
5	---	---	---	254	241	248	105	97	100	183	174	179
6	---	---	---	≥508	250	≥280	130	106	117	189	178	183
7	375	353	360	435	193	269	126	115	122	196	187	192
8	392	253	357	206	185	195	139	122	128	202	196	199
9	---	---	---	216	202	210	207	111	139	209	199	203
10	---	---	---	231	212	222	147	102	122	214	207	211
11	---	---	---	285	175	221	101	99	100	212	210	211
12	---	---	---	193	166	181	104	100	101	220	211	214
13	---	---	---	174	167	169	114	103	111	222	218	220
14	---	---	---	181	168	177	≥508	112	≥195	220	216	218
15	---	---	---	206	180	192	219	156	176	221	218	220
16	---	---	---	268	199	226	156	141	147	226	219	222
17	---	---	---	250	233	241	195	110	140	228	222	224
18	---	---	---	266	235	245	139	105	122	230	226	228
19	---	---	---	236	209	229	118	77	99	253	228	238
20	---	---	---	294	230	274	83	72	78	245	233	237
21	---	---	---	294	288	290	86	79	81	239	234	237
22	---	---	---	304	286	298	112	80	91	243	237	240
23	---	---	---	298	291	296	87	81	84	247	234	239
24	---	---	---	293	280	286	87	81	84	377	235	328
25	---	---	---	445	88	227	142	87	99	354	259	300
26	---	---	---	157	74	104	132	101	113	259	149	239
27	---	---	---	83	76	80	144	122	138	156	79	120
28	---	---	---	93	83	89	141	137	139	79	68	71
29	---	---	---	141	99	113	151	141	147	79	71	75
30	---	---	---	154	111	130	166	151	161	85	79	83
31	---	---	---	155	116	129	168	161	165	---	---	---
MONTH	392	253	359	≥508	74	≥219	≥508	72	≥121	377	68	201
YEAR	≥508	36	≥187									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	20.5	19.5	20.0	9.5	8.0	8.5	14.5	13.0	13.5
2	---	---	---	20.0	19.0	19.5	9.5	7.5	8.5	15.5	14.0	14.5
3	---	---	---	19.5	16.0	17.0	11.0	9.5	10.0	15.0	10.0	12.5
4	16.5	15.0	16.0	17.0	15.0	16.0	10.0	9.0	9.5	10.0	8.0	9.0
5	17.5	16.0	16.5	17.5	16.5	17.0	9.0	8.0	8.5	8.0	6.5	7.5
6	18.5	16.5	17.5	16.0	14.5	15.5	8.5	7.5	8.5	7.0	5.0	6.0
7	18.0	16.5	17.5	14.0	11.5	12.5	7.0	4.5	5.5	7.0	5.0	6.0
8	18.5	16.5	17.5	11.5	9.5	10.5	5.0	3.5	4.0	6.5	5.0	6.0
9	18.5	17.0	18.0	11.0	9.0	10.0	5.0	3.5	4.5	5.5	4.0	4.5
10	19.0	17.0	18.0	13.0	11.0	11.5	7.0	4.0	5.5	4.0	3.0	3.0
11	19.0	18.0	18.5	14.5	13.0	13.5	8.5	7.0	7.5	4.5	3.5	4.0
12	18.5	17.5	18.0	14.0	11.5	12.5	8.5	7.0	7.5	4.0	3.0	3.5
13	18.0	16.5	17.0	11.5	9.5	10.0	9.5	7.0	8.0	4.0	1.5	2.5
14	17.0	15.5	16.5	9.5	8.0	9.0	10.5	8.5	9.5	3.5	2.0	2.5
15	17.0	15.5	16.5	9.5	7.5	8.5	12.0	10.5	11.0	3.0	2.0	2.5
16	18.5	16.5	17.5	12.0	9.5	10.5	12.0	11.0	11.5	2.0	1.0	1.5
17	19.5	18.0	18.5	11.5	9.0	10.0	12.5	11.0	12.0	3.0	2.0	2.0
18	19.5	19.0	19.0	9.5	7.5	8.5	13.0	11.5	12.0	4.5	2.5	3.5
19	20.0	19.0	19.5	12.0	9.5	11.0	14.0	12.0	13.0	5.5	3.5	4.5
20	21.0	20.0	20.5	11.0	8.0	9.5	14.0	13.5	14.0	4.5	.5	3.5
21	22.0	20.5	21.0	8.0	6.0	7.0	15.0	14.0	14.5	.0	.0	.0
22	22.0	20.5	21.5	6.5	5.5	6.0	14.5	13.5	14.5	.0	.0	.0
23	22.0	21.0	21.5	7.5	6.0	6.5	13.5	11.0	12.0	.0	.0	.0
24	22.0	20.5	21.5	7.5	6.5	7.0	11.0	9.5	10.0	.5	.0	.0
25	21.5	20.0	20.5	7.5	6.0	7.0	12.5	10.5	11.5	2.0	.5	1.0
26	20.5	19.0	19.5	7.5	6.5	7.0	11.0	9.0	9.5	2.0	.5	1.0
27	20.0	18.0	19.0	9.0	7.0	8.0	10.0	9.5	9.5	2.0	.0	1.0
28	21.5	19.5	20.0	12.5	9.5	10.5	11.5	9.5	10.5	3.0	2.0	2.0
29	22.5	21.5	22.0	12.0	9.5	10.5	13.5	11.0	12.5	2.5	1.5	2.0
30	22.0	20.5	21.0	9.0	7.5	8.5	14.5	13.0	13.5	3.5	2.0	2.5
31	20.5	20.0	20.5	---	---	---	14.0	13.5	13.5	6.0	3.5	4.5
MONTH	22.5	15.0	19.0	20.5	5.5	11.0	15.0	3.5	10.0	15.5	.0	4.0

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.0	6.0	8.0	11.0	9.5	10.0	20.5	18.0	19.5	19.5	18.0	19.0
2	9.0	7.5	8.0	13.5	9.5	11.5	18.0	15.0	16.5	19.5	19.0	19.0
3	7.5	5.5	7.0	13.5	10.5	12.0	15.5	12.5	14.5	19.5	17.5	19.0
4	5.0	3.5	4.5	13.5	10.5	12.0	17.5	13.5	15.5	17.5	16.0	16.5
5	4.0	3.5	3.5	17.0	13.5	15.0	19.5	15.5	17.5	17.0	15.5	16.0
6	5.0	3.5	4.5	15.5	11.5	13.5	19.5	17.5	18.5	18.0	17.0	17.0
7	6.5	5.0	5.5	12.0	9.0	10.5	17.5	15.5	16.5	19.5	17.5	18.5
8	5.0	2.5	3.5	14.5	10.0	12.5	19.0	14.0	15.5	---	---	---
9	3.5	1.0	2.5	15.0	14.0	14.5	14.0	12.0	13.0	---	---	---
10	4.5	1.5	3.0	14.5	11.5	13.0	12.0	9.5	11.0	---	---	---
11	6.5	2.5	4.5	13.0	11.0	12.5	13.5	9.5	11.5	---	---	---
12	8.0	6.0	7.5	16.5	13.0	14.5	15.5	12.5	14.0	---	---	---
13	6.5	4.0	5.5	15.5	12.5	14.0	16.0	14.5	15.0	---	---	---
14	7.0	3.5	5.5	16.5	13.0	15.0	16.5	16.0	16.0	---	---	---
15	7.5	5.0	6.0	16.0	14.0	15.0	16.5	16.0	16.5	---	---	---
16	6.5	3.5	5.0	13.5	11.0	12.5	18.0	16.5	17.0	---	---	---
17	6.5	4.0	5.0	13.0	12.0	12.5	18.0	15.5	16.5	---	---	---
18	7.0	4.5	6.0	12.0	10.0	11.0	17.0	14.0	15.5	---	---	---
19	8.0	5.5	6.5	11.0	7.5	9.5	19.0	15.5	17.0	---	---	---
20	8.0	6.5	7.5	13.0	8.5	10.5	20.0	17.5	19.0	---	---	---
21	8.5	4.5	6.5	12.0	10.5	11.0	20.5	18.5	19.5	---	---	---
22	11.5	7.0	9.0	12.0	9.5	10.5	21.0	19.0	20.0	---	---	---
23	13.5	9.5	11.5	12.0	11.0	11.5	20.5	19.5	20.0	---	---	---
24	16.5	12.5	14.5	11.5	9.5	10.5	20.5	19.5	20.0	---	---	---
25	16.5	15.5	16.0	12.5	10.0	11.0	20.5	20.0	20.0	---	---	---
26	15.5	14.5	15.0	13.0	9.0	11.0	20.5	19.5	20.0	---	---	---
27	16.0	13.5	14.5	15.0	10.0	12.5	20.5	19.5	20.0	---	---	---
28	14.0	11.5	12.5	18.5	13.5	16.0	21.0	20.5	20.5	---	---	---
29	---	---	---	20.5	16.5	18.5	21.0	20.5	20.5	---	---	---
30	---	---	---	22.5	19.0	20.5	20.0	17.5	18.5	---	---	---
31	---	---	---	20.5	18.0	19.5	---	---	---	---	---	---
MONTH	16.5	1.0	7.5	22.5	7.5	13.0	21.0	9.5	17.0	19.5	15.5	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	22.5	21.5	22.5	25.5	23.5	24.5	24.0	22.5	23.5
2	---	---	---	23.5	21.5	22.5	23.5	21.5	22.0	24.0	21.5	23.0
3	---	---	---	23.5	23.0	23.0	21.5	20.0	21.0	25.0	22.5	23.5
4	---	---	---	23.5	23.0	23.0	20.5	19.0	20.0	25.0	23.5	24.5
5	---	---	---	24.0	23.0	23.0	[illegible]	19.5	20.5	25.0	24.0	24.5
6	---	---	---	25.5	23.0	24.0	22.5	20.5	21.5	25.5	24.0	25.0
7	22.5	22.0	22.0	26.0	24.5	25.0	23.5	21.5	22.5	26.0	24.5	25.0
8	23.0	22.0	22.5	25.5	24.0	25.0	23.0	22.0	22.5	25.5	24.5	25.0
9	---	---	---	25.5	24.5	24.5	23.5	22.0	22.5	25.5	24.5	25.0
10	---	---	---	25.0	24.0	24.5	23.5	22.5	23.0	25.5	25.0	25.0
11	---	---	---	24.5	23.0	24.0	24.0	22.5	23.5	25.5	24.5	25.0
12	---	---	---	25.0	23.5	24.0	24.5	23.0	24.0	24.5	22.0	23.0
13	---	---	---	25.5	23.5	24.5	25.0	23.5	24.5	21.5	19.0	20.0
14	---	---	---	26.5	24.5	25.5	25.5	24.0	24.5	18.5	16.0	17.0
15	---	---	---	27.0	24.5	25.5	25.5	24.0	25.0	16.5	15.0	16.0
16	---	---	---	26.0	25.0	25.5	25.5	24.0	25.0	16.5	15.5	16.0
17	---	---	---	25.0	24.0	24.5	25.0	24.0	24.5	16.5	15.5	16.0
18	---	---	---	24.0	23.0	23.5	24.0	23.5	24.0	17.5	16.5	17.0
19	---	---	---	23.0	21.5	22.0	24.0	23.0	23.5	18.5	17.0	17.5
20	---	---	---	22.0	21.5	21.5	24.5	23.0	24.0	19.5	18.0	18.5
21	---	---	---	22.0	21.5	21.5	24.0	22.5	23.5	19.5	18.0	19.0
22	---	---	---	22.0	21.5	21.5	23.5	22.5	23.0	19.5	19.0	19.5
23	---	---	---	21.5	21.0	21.5	22.5	21.5	22.0	20.0	19.0	19.5
24	---	---	---	21.0	20.5	20.5	21.5	20.0	20.5	20.0	19.0	19.5
25	---	---	---	21.5	20.0	20.5	22.5	21.0	21.5	20.5	20.0	20.0
26	---	---	---	22.5	21.0	22.0	24.5	22.5	23.5	20.0	19.5	20.0
27	---	---	---	23.0	22.0	22.5	24.5	23.0	24.0	20.5	20.0	20.0
28	---	---	---	23.0	22.5	23.0	24.5	24.0	24.0	20.0	19.0	19.5
29	---	---	---	23.0	22.5	22.5	24.5	22.5	23.5	18.5	17.0	17.5
30	---	---	---	23.5	22.5	23.0	24.5	23.0	24.0	18.5	16.5	17.5
31	---	---	---	24.5	23.0	24.0	24.5	23.0	23.5	---	---	---
MONTH	23.0	22.0	22.5	27.0	20.0	23.0	25.5	19.0	23.0	26.0	15.0	20.5
YEAR	27.0	.0	15.0									

02084160 CHICOD CREEK AT SECONDARY ROAD 1760 NEAR SIMPSON, NC--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16	2.6	1	.00	3	.04	4	.06	40	17	8	.71
2	11	1.7	1	.00	6	.07	3	.04	32	21	10	1.1
3	8	.93	2	.01	7	.12	9	.63	45	41	12	1.3
4	10	.78	5	.04	3	.06	37	10	16	8.0	9	.83
5	7	.32	7	.12	6	.14	46	19	11	4.0	6	.50
6	6	.19	3	.03	7	.28	13	3.2	45	51	5	.36
7	9	.21	4	.04	6	.18	8	1.3	21	23	4	.23
8	10	.19	3	.03	5	.12	6	.78	8	4.6	4	.19
9	9	.15	4	.03	4	.08	5	.49	5	1.8	4	.17
10	4	.06	5	.04	5	.10	9	.83	6	1.7	3	.11
11	4	.05	3	.02	4	.07	40	7.6	5	1.2	7	.25
12	4	.04	3	.02	3	.05	20	3.8	46	30	10	.35
13	4	.04	3	.02	3	.05	7	1.1	39	28	7	.23
14	4	.04	3	.02	3	.05	5	.63	13	5.7	8	.26
15	3	.03	3	.02	4	.07	6	.62	10	3.1	7	.21
16	4	.03	3	.02	4	.06	7	.55	7	1.7	5	.13
17	3	.02	4	.03	3	.05	20	1.8	6	1.2	4	.12
18	3	.02	2	.01	3	.05	14	2.1	7	1.2	4	.12
19	3	.02	2	.02	4	.06	4	.59	6	.91	5	.12
20	3	.02	3	.03	3	.04	3	.39	8	1.3	6	.14
21	4	.03	3	.03	5	.08	2	.22	7	1.4	5	.11
22	2	.01	3	.03	4	.06	7	.62	7	1.3	32	4.1
23	2	.01	2	.02	4	.06	7	.51	6	1.0	29	4.8
24	3	.02	2	.02	3	.04	5	.31	7	1.1	10	1.4
25	3	.02	2	.02	4	.06	6	.39	6	.81	10	12
26	3	.02	2	.02	8	.11	9	.51	6	.71	9	.70
27	3	.02	2	.02	4	.06	3	.11	7	.76	9	.58
28	6	.05	6	.08	3	.04	5	.20	7	.68	8	.41
29	7	.06	21	.54	4	.06	7	.40	---	---	7	.26
30	3	.03	7	.11	3	.04	5	.31	---	---	8	.28
31	2	.02	---	---	4	.06	48	12	---	---	8	.26
TOTAL	---	7.73	---	1.44	---	2.41	---	71.09	---	255.17	---	32.33

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8	.24	3	.01	0	.00	32	.10	30	1.6	4	.04
2	8	.20	4	.02	0	.00	21	.12	63	27	7	.06
3	8	.18	5	.02	0	.00	13	.02	37	14	8	.06
4	8	.17	4	.02	0	.00	16	.01	38	6.0	2	.01
5	7	.14	5	.02	0	.00	10	.00	28	1.7	2	.00
6	8	.14	5	.01	0	.00	14	.05	20	.53	4	.02
7	9	.15	4	.00	15	.00	46	.70	20	.33	3	.01
8	9	.13	3	.00	12	.00	42	.24	23	.32	4	.01
9	10	.14	4	.00	0	.00	24	.06	24	1.6	6	.02
10	11	.14	3	.00	0	.00	10	.02	11	1.1	10	.03
11	8	.10	3	.00	0	.00	170	21	9	.90	16	.05
12	5	.06	6	.02	0	.00	64	9.9	8	.32	13	.03
13	8	.09	8	.02	0	.00	21	1.1	7	.15	10	.02
14	7	.08	6	.01	0	.00	17	9.8	6	.08	6	.01
15	6	.08	9	.02	0	.00	13	.13	4	.04	4	.00
16	8	.12	11	.02	0	.00	15	.13	4	.03	6	.02
17	31	1.1	6	.00	0	.00	18	.19	19	1.2	2	.00
18	17	.33	10	.01	0	.00	20	.33	20	1.6	4	.01
19	11	.15	9	.00	0	.00	18	.21	31	14	3	.00
20	10	.12	4	.00	0	.00	16	.07	11	5.3	5	.01
21	7	.07	4	.00	0	.00	16	.06	8	1.6	2	.00
22	11	.10	6	.00	0	.00	15	.05	19	4.7	4	.01
23	9	.07	5	.00	0	.00	13	.04	9	2.0	2	.00
24	5	.04	4	.00	0	.00	13	.03	7	7.4	5	.02
25	5	.04	3	.00	0	.00	104	4.1	17	2.1	5	.02
26	4	.02	4	.00	0	.00	104	9.6	22	3.4	24	1.0
27	4	.02	5	.00	0	.00	24	2.1	8	.43	112	80
28	4	.02	5	.00	0	.00	17	.83	5	.13	20	22
29	2	.00	0	.00	0	.00	16	.56	7	.13	8	4.2
30	2	.00	0	.00	0	.00	13	.60	9	.13	4	.93
31	---	---	0	.00	---	---	12	.39	4	.05	---	---
TOTAL	---	4.24	---	0.20	---	0.00	---	62.54	---	99.87	---	108.59

TOTAL LOAD FOR YEAR: 645.61 TONS.

PAMLICO RIVER BASIN

02084160 CHICOD CR AT SECONDARY ROAD 1760 NEAR SIMPSON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
85/01/03	1420	WATER	0	5.94	12		7.00	12.0	8.2	4.3	910
85/02/18	1300	WATER	0	6.81	65	98	6.90	5.0		10.6	40
85/03/25	1300	WATER	0	6.48	38	115	7.20	11.0		9.2	90
85/04/03	1430	WATER	0	5.84	8	156	7.50	15.0	4.6	10.4	10
85/05/31	1200	WATER	0	5.20	0	220	7.00	20.0		3.0	90
85/06/14	1000	WATER	0	5.00	0	232	7.40	20.0		.4	30
85/07/02	1350	WATER	0		2	216	7.30	22.0	24.0	5.5	370
85/08/12	1400	WATER	0.1	6.00	13	94	6.30	22.0		5.0	110
85/09/10	1245	WATER	0.1	5.49	1	206		26.0		3.8	60

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/03	1420	WATER	0	56	4	170	1.90	.130	.700	.330	.210
85/02/18	1300	WATER	0		3	97	1.30	.490	.700	.150	.090
85/03/25	1300	WATER	0	23	7	110	1.40	.840	1.200	.280	.190
85/04/03	1430	WATER	0	36	1	120	2.30	.040	.400	.320	.200
85/05/31	1200	WATER	0	110	15	240	.21	.130	.600	.480	.290
85/06/14	1000	WATER	0		13	290	.03	5.900	8.200	1.100	.700
85/07/02	1350	WATER	0	73	21	210	1.30	.510	7.700	1.200	9.500
85/08/12	1400	WATER	0.1	13	3	130	1.30	.160	.600	.460	.320
85/09/10	1245	WATER	0.1		3	160	1.40	.060	.900	.600	.500

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/03	1420	WATER	0		20K	50K	20K	100K		100K	20K
85/04/03	1430	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/02	1350	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20

K Less than noted value.

02084164 JUNIPER BRANCH NEAR SIMPSON, NC

LOCATION.--Lat 35°33'55", long 77°14'43", Pitt County, Hydrologic Unit 03020103, on right bank at downstream side of bridge on Secondary Road 1766, 0.8 mi upstream from mouth, and 1.8 mi southwest of Simpson.

DRAINAGE AREA.--7.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is National Geodetic Vertical Datum of 1929 (Soil Conservation Service, bench mark). Prior to July 25, 1977, at datum 11.41 ft higher.

REMARKS.--Records good. Channel improvement, beginning Aug. 10, 1979, extends upstream from a point 0.5 mi upstream from gage.

AVERAGE DISCHARGE.--10 years, 8.33 ft^3/s, 15.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 996 ft^3/s May 5, 1978, gage height, 16.83 ft, present datum; no flow at times during most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 6	0730	134	14.70	Aug. 19	0330	113	14.50
Feb. 11	2145	107	14.43	Sept. 27	0530	121	14.58
Aug. 2	0315	*260	*15.48				

No flow June 26, 27, due to irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	2.3	2.3	2.9	16	11	6.3	2.2	.10	2.6	11	1.6
2	8.2	2.8	2.2	2.9	42	10	5.8	2.0	.70	1.5	111	1.5
3	6.5	2.2	5.2	8.0	27	9.2	5.5	2.1	.75	.78	12	1.4
4	5.2	4.0	3.2	31	17	9.1	5.4	2.1	.81	1.0	6.5	1.3
5	4.3	4.8	4.4	20	25	9.0	5.2	1.8	.98	8.9	4.2	1.2
6	3.9	3.2	5.7	13	73	7.8	4.5	1.7	1.8	9.5	3.1	1.1
7	3.6	2.6	3.8	11	32	7.7	4.2	1.5	.92	2.3	2.3	.97
8	3.4	2.5	3.4	9.7	21	7.8	4.0	1.3	.88	1.0	16	1.0
9	3.2	2.4	3.2	8.2	16	7.9	3.9	.96	.77	.76	15	.96
10	2.9	2.4	3.1	9.8	14	7.5	3.9	.50	.70	.64	7.4	.92
11	2.8	2.4	3.1	12	31	7.6	3.8	2.1	.68	32	8.4	.95
12	2.6	2.2	2.9	10	43	7.3	3.7	1.5	e.66	6.5	4.3	.92
13	2.5	2.0	2.9	9.1	21	6.6	3.7	1.4	e.68	2.7	3.1	.88
14	2.3	1.9	2.9	8.5	17	6.4	3.9	1.2	e.64	1.5	2.4	.82
15	2.1	1.8	2.9	7.4	15	6.0	4.1	1.1	e.61	1.1	1.9	.83
16	2.0	1.9	2.9	6.5	13	6.2	4.6	1.1	e1.5	1.0	1.6	.83
17	2.1	1.8	3.1	9.6	13	7.5	4.9	1.2	e.92	.96	1.6	.80
18	2.2	1.9	3.7	10	12	6.4	3.7	.94	.81	.86	7.3	.82
19	2.4	2.4	3.4	8.8	13	5.8	3.5	.87	.95	.78	51	.83
20	2.3	2.4	3.4	8.0	14	5.7	3.2	.80	.71	.74	12	.75
21	1.9	2.1	3.3	6.5	13	5.7	2.8	.78	.48	.60	8.1	.66
22	1.8	2.0	3.1	6.5	12	13	2.6	1.0	.43	.56	20	.93
23	1.8	2.1	3.0	6.5	12	12	2.5	.84	.42	.57	9.6	1.1
24	1.7	2.1	2.9	6.4	11	10	2.3	.92	.40	.58	6.2	.98
25	1.8	2.0	2.9	6.3	11	9.2	2.2	.92	.24	6.8	4.8	.85
26	2.0	2.0	2.7	5.3	11	8.4	2.0	.75	.00	4.3	4.3	7.5
27	1.9	2.0	3.0	4.9	10	8.1	1.8	.69	.00	2.0	3.4	79
28	1.8	3.2	2.9	5.6	9.4	7.8	2.5	.68	.05	1.4	2.9	27
29	4.4	4.4	2.9	6.0	---	7.5	2.4	.76	.24	1.3	2.5	11
30	3.2	2.8	2.9	5.8	---	7.1	2.2	.78	.82	5.6	2.1	7.4
31	2.7	---	2.9	23	---	6.8	---	.04	---	5.3	1.8	---
TOTAL	100.5	74.6	100.2	289.2	564.4	248.1	111.1	36.53	19.65	106.13	347.8	156.80
MEAN	3.24	2.49	3.23	9.33	20.2	8.00	3.70	1.18	.65	3.42	11.2	5.23
MAX	11	4.8	5.7	31	73	13	6.3	2.2	1.8	32	111	79
MIN	1.7	1.8	2.2	2.9	9.4	5.7	1.8	.04	.00	.56	1.6	.66
CFSM	.43	.33	.43	1.24	2.69	1.07	.49	.16	.09	.46	1.49	.70
IN.	.50	.37	.50	1.43	2.80	1.23	.55	.18	.10	.53	1.73	.78

CAL YR 1984	TOTAL	4638.75	MEAN	12.7	MAX	269	MIN	.65	CFSM 1.69	IN.	23.01
WTR YR 1985	TOTAL	2155.01	MEAN	5.90	MAX	111	MIN	.00	CFSM .79	IN.	10.69

e Estimated

02084164 JUNIPER BRANCH NEAR SIMPSON, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Station operated to define the effects of channelization on stream quantity and quality in the Chicod Creek basin.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
04...	1055	5.8	--	--	--	--	--	--	--	--	--
NOV											
14...	1245	2.0	179	6.3	9.0	10	771	8.2	70	40	160
DEC											
17...	1110	2.9	--	--	--	--	--	--	--	--	--
FEB											
08...	1030	21	--	--	--	--	--	--	--	--	--
MAR											
26...	1250	8.0	--	--	--	--	--	--	--	--	--
APR											
12...	0945	4.2	166	6.2	13.5	30	773	8.2	78	K32	K250
MAY											
07...	1635	1.6	--	--	--	--	--	--	--	--	--
JUL											
15...	1145	1.3	180	6.2	25.0	45	759	5.5	67	K40	280
25...	1245	10	147	6.6	21.5	30	695	6.2	77	--	--
25...	1254	10	--	--	--	--	--	--	--	--	--
AUG											
02...	1100	84	120	6.0	22.0	150	762	6.2	71	--	--
SEP											
05...	1225	1.3	--	--	--	--	--	--	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	61	25	20	2.7	6.6	18	.4	3.6	18	13
DEC										
17...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	55	27	18	2.5	6.0	18	.4	2.4	19	10
MAY										
07...	--	--	--	--	--	--	--	--	--	--
JUL										
15...	60	24	19	3.0	7.0	19	.4	3.9	27	10
25...	49	18	16	2.1	5.7	19	.4	3.2	20	9.5
25...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	39	31	12	2.2	3.6	15	.3	3.7	26	6.6
SEP										
05...	--	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	.10	10	123	96	.17	.66	3.1	.060	3.2	3.0
DEC										
17...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	.10	5.7	99	83	.13	1.1	1.9	.070	2.0	2.1
MAY										
07...	--	--	--	--	--	--	--	--	--	--
JUL										
15...	.20	9.8	140	100	.19	.49	3.2	.080	3.3	3.4
25...	.20	6.9	104	81	.14	2.9	1.7	.010	1.7	1.8
25...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	.20	5.6	98	65	.13	22	.58	.020	.60	.44
SEP										
05...	--	--	--	--	--	--	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

02084164 JUNIPER BRANCH NEAR SIMPSON, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	2.6	1.4	1.2	5.8	26	4.2	.090	<.010	1	--
DEC										
17...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	.50	.00	.50	2.5	11	4.6	.190	.090	1	0
MAY										
07...	--	--	--	--	--	--	--	--	--	--
JUL										
15...	.90	.40	.50	4.2	19	3.9	.180	.100	2	1
25...	1.2	.20	1.0	2.9	13	2.8	.370	.160	2	1
25...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	.90	--	--	1.5	6.6	--	.210	.120	2	1
SEP										
05...	--	--	--	--	--	--	--	--	--	--

DATE	ARSENIC DISSOLVED (UG/L AS AS)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
OCT										
04...	--	--	--	--	--	--	--	--	--	--
NOV										
14...	<1	<1	--	<1	580	370	210	1	0	1
DEC										
17...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
26...	--	--	--	--	--	--	--	--	--	--
APR										
12...	1	5	2	3	630	410	220	2	--	--
MAY										
07...	--	--	--	--	--	--	--	--	--	--
JUL										
15...	1	5	1	4	440	360	78	5	3	2
25...	1	7	3	4	1900	1800	78	5	3	2
25...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	1	7	4	3	720	550	170	4	3	1
SEP										
05...	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT									
04...	--	--	--	--	--	--	--	4	.06
NOV									
14...	<.1	--	<.1	30	20	7	4.7	4	.02
DEC									
17...	--	--	--	--	--	--	--	2	.02
FEB									
08...	--	--	--	--	--	--	--	11	.63
MAR									
26...	--	--	--	--	--	--	--	2	.04
APR									
12...	<.1	--	<.1	40	10	32	--	2	.02
MAY									
07...	--	--	--	--	--	--	--	12	.05
JUL									
15...	.1	.0	.2	40	30	13	5.1	6	.02
25...	.1	.0	.2	30	20	6	11	118	3.3
25...	--	--	--	--	--	--	--	150	4.2
AUG									
02...	<.1	--	.1	30	10	19	12	29	6.6
SEP									
05...	--	--	--	--	--	--	--	9	.03

02084540 DURHAM CREEK AT EDWARD, NC

LOCATION.--Lat 35°19'25", long 76°52'26", Beaufort County, Hydrolgic Unit 03020104, on left bank 5 ft downstream from bridge on Secondary Road 1949, at Edward, and 6.8 mi upstream from mouth.

DRAINAGE AREA.--About 26 mi^2.

WATER-DISCHAGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements water years 1950-54, 1956-65. August 1965 to current year. Records of runoff in cubic feet per second per square mile and inches published in WDR NC-78-1 and NC-79-1 are unreliable and should not be used.

REVISED RECORDS.--WDR NC-74-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 0.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Runoff affected by ditches and canals above station. Several measurements of water temperature were made during the year.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--20 years, 37.9 ft^3/s, 19.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,070 ft^3/s Oct. 1, 1971, gage height, 13.24 ft; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 602 ft^3/s Sept. 28, gage height, 9.63 ft. No flow several days in June and July.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	6.8	11	6.0	53	e40	19	1.6	e.02	e.00	4.0	18
2	39	6.0	9.2	5.8	69	e36	17	1.4	e.01	.00	7.6	17
3	34	5.8	11	7.3	101	e32	15	1.3	e.00	.00	7.6	15
4	30	6.1	13	11	90	e30	14	1.5	e.00	.00	6.4	12
5	28	8.0	15	13	80	e28	12	1.5	e.00	.00	5.6	10
6	25	8.4	17	12	129	e26	11	1.3	e.01	.00	5.1	8.7
7	23	7.5	18	10	151	e24	9.5	1.1	e.00	.00	4.5	7.5
8	21	6.6	18	9.4	119	e22	8.5	.88	e.00	.00	9.3	7.1
9	19	5.9	18	8.5	91	e20	7.7	.80	e.00	.00	24	6.1
10	17	5.8	17	9.2	75	e20	6.9	.77	e.00	.00	32	5.5
11	15	6.1	17	19	63	e18	6.8	.70	e.00	.01	40	4.8
12	13	7.5	17	23	88	e16	6.3	1.0	.00	e.00	32	4.3
13	12	7.5	17	22	127	e15	5.9	1.5	.00	e.00	24	4.0
14	11	6.8	16	20	109	e14	6.9	1.5	.00	e.00	19	3.5
15	9.7	6.4	14	18	87	e13	10	1.2	.00	e.00	14	2.9
16	8.8	5.8	14	15	73	e12	11	.94	.00	e.00	11	2.3
17	8.2	5.6	13	17	62	e14	12	.74	.00	e.00	8.9	1.8
18	7.7	5.3	12	24	55	14	10	.57	.00	e.00	11	1.4
19	7.3	5.3	11	25	48	13	8.5	.45	.00	e.00	16	1.2
20	6.9	5.3	11	24	49	12	7.3	.35	.00	e.00	20	1.1
21	6.4	5.2	10	21	64	11	6.5	.28	.00	.00	19	.90
22	6.0	5.1	9.7	17	61	24	5.7	.24	.00	.00	24	3.3
23	5.5	4.9	9.0	15	54	73	5.1	.21	.00	.01	46	6.5
24	5.0	4.7	8.3	15	48	73	4.3	.16	.00	.02	54	7.4
25	4.8	4.5	7.9	16	43	59	4.0	.13	.00	.06	40	7.0
26	4.5	4.4	7.4	16	40	47	3.5	.10	.00	.12	33	11
27	4.4	4.3	7.1	13	43	39	3.0	.06	.00	.13	27	335
28	4.2	4.8	7.0	14	e42	33	2.7	.04	.00	.16	23	523
29	5.0	8.8	6.8	16	---	28	2.3	.03	.00	.76	19	292
30	6.9	11	6.6	16	---	25	1.9	e.02	.00	4.4	17	178
31	7.6	---	6.4	25	---	22	---	.03	---	4.9	17	---
TOTAL	438.9	186.2	375.4	483.2	2114	853	244.3	22.40	.04	10.57	621.0	1498.30
MEAN	14.2	6.21	12.1	15.6	75.5	27.5	8.14	.72	.00	.34	20.0	49.9
MAX	43	11	18	25	151	73	19	1.6	.02	4.9	54	523
MIN	4.2	4.3	6.4	5.8	40	11	1.9	.02	.00	.00	4.0	.90

CAL YR 1984 TOTAL 15456.11 MEAN 42.2 MAX 1100 MIN .03
WTR YR 1985 TOTAL 6847.31 MEAN 18.8 MAX 523 MIN .00

e Estimated

02084540 DURHAM CREEK AT EDWARD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/02/18	1200	WATER	0	5.72	55	57	5.00	4.0	2.8	10.3	10K
85/03/25	1110	WATER	0	5.82	59	52	5.30	11.0		7.8	80
85/04/20	1400	WATER	0	4.13	7	80	4.50	21.0	3.2	4.5	30
85/05/20	1330	WATER	0	3.40	.3	47	5.00	18.0		1.8	10K
85/06/28	1055	WATER	0	2.98	0	66	5.80	21.5		.7	10
85/07/08	1530	WATER	0	2.92	0	78	6.40	26.0	42.0	1.5	80
85/08/12	1500	WATER	0.1	5.06	30	137	4.00	23.0		3.5	
85/09/10	1415	WATER	0.1	4.00	5	60		25.0		4.3	10

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/02/18	1200	WATER	0	27	1	76	.01	.010K	.200	.010	.010K
85/03/25	1110	WATER	0		2	74					
85/04/20	1400	WATER	0		1	120	.02	.060	.600	.040	.040
85/05/20	1330	WATER	0	25	5	160					
85/06/28	1055	WATER	0	9	13	200					
85/07/08	1530	WATER	0	11	26	98	.04	1.800	5.100	.890	.110
85/08/12	1500	WATER	0.1		1K	130					
85/09/10	1415	WATER	0.1		5	170					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/18	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/20	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/08	1530	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30

K Less than noted value.

02084557 VAN SWAMP NEAR HOKE, NC

LOCATION.--Lat 35°43'49", long 76°44'49", Washington County, Hydrologic Unit 03020104, on left bank at upstream side of culvert on State Highway 32, 4.8 mi east of Hoke.

DRAINAGE AREA.--23 mi^2.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--May 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above Naticinal Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--8 years, 26.7 ft^3/s, 14.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 409 ft^3/s Nov. 6, 1977, gage height, 4.45 ft; no flow at times during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 154 ft^3/s Sept. 27, gage height, 4.63 ft; no flow Sept. 12-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	1.5	3.2	1.8	52	32	11	.98	.33	.33	.65	.30
2	22	1.6	2.0	1.8	65	32	9.7	.86	.28	.27	2.9	.21
3	19	1.6	2.4	2.4	79	31	8.9	.81	.26	.28	2.3	.13
4	16	1.4	3.3	13	77	29	8.1	.80	.19	.28	1.6	.07
5	13	1.5	3.4	28	75	28	7.4	.76	.28	.28	1.2	.07
6	11	1.5	3.8	26	94	26	6.7	.67	.68	.33	.88	.06
7	8.9	1.4	3.9	23	101	24	6.1	.61	.51	.55	.69	.03
8	7.7	1.6	3.8	21	97	23	5.6	.52	.39	.63	.57	.02
9	6.8	1.2	3.6	18	90	22	5.4	.48	.33	.59	.60	.02
10	6.0	1.2	3.4	17	84	20	5.0	.48	.29	.49	.48	.02
11	5.3	1.2	3.2	21	79	19	4.8	.48	.88	2.4	.39	.01
12	4.8	1.4	3.1	23	84	18	4.4	.48	.76	2.7	.33	.00
13	4.4	1.1	3.0	22	92	16	4.2	.48	.48	2.8	.28	.00
14	3.9	.97	2.9	20	89	15	4.3	.46	.31	1.6	.25	.00
15	3.7	.95	2.7	18	84	14	4.7	.41	.24	1.1	.12	.00
16	3.4	.86	2.5	17	78	14	5.2	.36	.23	1.2	.05	.00
17	3.3	.86	2.5	16	73	13	5.2	.33	.28	1.2	2.3	.00
18	3.2	.79	2.5	20	67	13	4.8	.23	.27	.84	4.6	.00
19	3.2	.91	2.5	21	62	11	4.3	.22	.31	.58	1.6	.00
20	3.1	1.2	2.4	20	57	10	3.9	.19	.34	.45	.65	.00
21	2.8	1.1	2.4	18	54	9.3	3.5	.14	.28	.33	.47	.00
22	2.5	1.1	2.4	16	51	9.4	3.1	.27	.25	.25	3.0	.00
23	2.2	.98	2.2	14	47	18	2.7	.20	.14	.14	3.7	.03
24	1.9	.98	2.2	14	44	19	2.3	1.4	.06	.11	2.4	.03
25	1.8	.98	2.1	13	41	19	2.1	1.5	.04	.10	1.7	.01
26	1.8	.98	2.1	12	38	17	1.8	1.2	.03	.22	1.3	4.7
27	1.6	.98	1.9	11	36	16	1.5	.84	.02	.28	.97	131
28	1.6	1.4	1.9	11	33	15	1.4	.62	.02	.46	.78	112
29	1.6	3.2	1.9	12	---	13	1.3	.50	.01	.55	.60	86
30	1.6	3.3	1.9	16	---	13	1.1	.41	.10	.91	.49	67
31	1.6	---	1.9	30	---	11	---	.39	---	1.1	.38	---
TOTAL	193.7	39.74	83.0	517.0	1923	569.7	140.5	18.08	8.59	23.35	38.23	401.71
MEAN	6.25	1.32	2.68	16.7	68.7	18.4	4.68	.58	.29	.75	1.23	13.4
MAX	24	3.3	3.9	30	101	32	11	1.5	.88	2.8	4.6	131
MIN	1.6	.79	1.9	1.8	33	9.3	1.1	.14	.01	.10	.05	.00
CFSM	.27	.06	.12	.73	2.99	.80	.20	.03	.01	.03	.05	.58
IN.	.31	.06	.13	.84	3.11	.92	.23	.03	.01	.04	.06	.65

CAL YR 1984	TOTAL	10501.21	MEAN	28.7	MAX	141	MIN	.02	CFSM	1.25	IN.	16.98
WTR YR 1985	TOTAL	3956.60	MEAN	10.8	MAX	131	MIN	.00	CFSM	.47	IN.	6.40

02084557 VAN SWAMP NEAR HOKE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/25	1530	WATER	0	.87	13	98	4.10	5.0	2.8	10.6	10
85/02/26	1620	WATER	0	1.79	37	126	3.80	12.0	7.8	7.7	10K
85/03/06	1530	WATER	0	1.39	26	126		12.0		7.5	10K
85/04/10	1530	WATER	0	.52	5	153	4.00	10.7	5.8	9.7	10K
85/05/31	1030	WATER	0	.17	.1	77	5.20	20.0	85.0	2.2	20
85/06/25	1430	WATER	0	.15	.03	69	5.30	27.0	75.0	.5	10
85/07/10	1520	WATER	0	.22	.4	72	5.00	24.0	80.0	1.5	60
85/09/24	1635	WATER	0.1	.21	.1	62	5.20	23.0	60.0	1.4	190

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/25	1530	WATER	0		4	110	.34	.060	.500	.010K	.010K
85/02/26	1620	WATER	0		6	140	.75	.060	.600	.010	.010K
85/03/06	1530	WATER	0		6	140	.53	.060	.600	.010	.010K
85/04/10	1530	WATER	0		1K	140	.16	.030	.700	.020	.010
85/05/31	1030	WATER	0	33	32	310	.06	1.100	2.400	.070	.010K
85/06/25	1430	WATER	0		26	240	.01	1.700	3.500	.100	.010K
85/07/10	1520	WATER	0		15	130	.02	2.300	3.900	.100	.010
85/09/24	1635	WATER	0.1		33	150	.16	.760	1.800	.080	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/25	1530	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/10	1530	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/10	1520	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02085070 ENO RIVER NEAR DURHAM, NC

LOCATION.--Lat 36°04'20", long 78°54'30", Durham County, Hydrologic Unit 03020201, on right bank 275 ft downstream from bridge on U.S. Highway 501, 0.2 mi downstream from Crooked Creek, and 5 mi north of Durham.

DRAINAGE AREA.--141 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1955. August 1963 to current year.

REVISED RECORDS.--WDR NC-72-1: 1968-71(M), 1971(P).

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 19, 1966, at site 275 ft upstream at datum 2.35 ft higher. Nov. 20, 1966 to Sept. 30, 1967 water-stage recorder and crest-stage gage at present site at datum 0.94 ft higher. Satellite data transmitter at station.

REMARKS.--Records good. Some regulation during periods of low flow caused by mill 600 ft upstream.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--22 years, 130 ft^3/s, 12.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,620 ft^3/s Apr. 26, 1978, gage height, 19.65 ft; minimum, 0.06 ft^3/s Aug. 14, 15, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	0800	4,350	12.01	Aug. 18	1900	*7,150	*16.50
Feb. 2	0930	2,560	8.54				

Minimum discharge, 1.9 ft^3/s due to regulation, Aug. 15; minimum gage height, 0.99 ft, July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	11	24	27	2730	165	55	28	28	11	53	383
2	51	12	21	43	1930	142	50	27	26	9.4	48	192
3	24	12	223	1020	761	121	48	170	24	9.0	29	83
4	16	10	97	1340	383	105	48	153	21	6.5	20	55
5	11	11	122	787	305	102	47	68	19	5.8	12	42
6	8.2	13	471	303	496	94	50	51	19	4.9	8.0	34
7	6.5	12	164	173	508	86	50	41	19	4.3	5.8	29
8	5.3	10	82	125	283	84	47	35	18	5.5	4.3	27
9	5.3	9.2	58	98	191	85	47	32	18	5.4	85	24
10	5.2	9.0	47	81	154	83	45	29	17	5.1	25	22
11	3.9	13	40	73	135	78	45	29	14	4.3	17	20
12	2.9	22	e37	66	815	76	48	32	13	3.8	9.7	18
13	3.3	17	e35	61	500	70	49	39	16	4.0	6.5	17
14	4.6	14	33	55	274	69	58	33	16	6.7	5.3	16
15	3.8	12	32	53	194	68	60	28	15	6.1	3.3	17
16	3.5	10	30	49	153	65	60	154	12	21	2.3	17
17	4.6	9.5	29	49	133	65	87	87	13	14	2.4	20
18	5.1	10	28	57	118	60	66	94	14	6.7	3250	20
19	4.9	9.7	28	57	104	56	51	60	15	4.1	882	19
20	13	10	28	54	103	53	44	43	9.9	3.1	344	17
21	10	15	28	44	96	56	42	44	7.0	2.9	1020	15
22	8.3	15	30	42	89	65	38	73	5.2	11	371	16
23	12	14	30	42	89	99	35	1060	4.5	5.4	154	18
24	15	13	29	44	91	111	33	242	3.7	2.8	78	20
25	11	13	29	46	89	153	32	129	2.9	50	338	21
26	9.4	12	28	46	584	115	29	86	2.4	167	494	21
27	9.8	12	27	42	421	89	29	59	3.1	79	157	19
28	12	21	26	45	233	84	30	44	3.6	212	108	16
29	11	46	27	52	---	77	32	39	5.8	79	91	14
30	11	36	28	55	---	72	30	34	8.0	43	59	13
31	13	---	28	185	---	58	---	31	---	35	1060	---
TOTAL	448.6	433.4	1939	5214	11962	2706	1385	3074	393.1	827.8	8742.6	1245
MEAN	14.5	14.4	62.5	168	427	87.3	46.2	99.2	13.1	26.7	282	41.5
MAX	144	46	471	1340	2730	165	87	1060	28	212	3250	383
MIN	2.9	9.0	21	27	89	53	29	27	2.4	2.8	2.3	13
CFSM	.10	.10	.44	1.19	3.03	.62	.33	.70	.09	.19	2.00	.29
IN.	.12	.11	.51	1.38	3.16	.71	.37	.81	.10	.22	2.31	.33

CAL YR 1984	TOTAL	64748.1	MEAN	177	MAX	3850	MIN	2.9	CFSM	1.26	IN.	17.08
WTR YR 1985	TOTAL	38370.5	MEAN	105	MAX	3250	MIN	2.3	CFSM	.74	IN.	10.12

e Estimated

02085070 ENO RIVER NEAR DURHAM, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/26	1050	WATER	0	1.52	9	108	7.10	23.0		8.0	50
84/11/13	1030	WATER	0	1.64	15	92	7.20	9.0	3.6	11.4	70
84/12/10	1100	WATER	0	1.80	35	50		5.0		13.0	2000
85/01/22	1100	WATER	0	1.83	38	52		.0		14.0	30
85/02/12	1110	WATER	0	5.05	1110	40	7.00	5.0	70.0	11.6	850
85/03/19	1000	WATER	0	1.97	54	60	7.00	9.0		11.7	10
85/04/11	0945	WATER	0	1.88	48	72	7.30	13.0		10.8	10
85/05/16	1050	WATER	0	2.46	162	71	7.10	22.0	60.0	8.4	15000
85/06/20	0920	WATER	0	1.44	10	100	7.00	23.0		7.7	110
85/07/17	1010	WATER	0	1.45	14	115	6.80	25.0		6.6	150
85/08/26	1055	WATER	0.1	3.67	543	63	7.00	23.0	170.0	9.5	2500
85/09/20	1025	WATER	0.1	1.64	17	90	7.20	19.0		11.0	

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/26	1050	WATER	0	51	6	100	.02	.020	.300	.170	.100
84/11/13	1030	WATER	0	63	1	110	.01	.030	.200	.210	.130
84/12/10	1100	WATER	0	20	15	100	.45	.020	.400	.130	.060
85/01/22	1100	WATER	0		3	89	.64	.020	.300	.170	.110
85/02/12	1110	WATER	0	85	99	220	.46	.040	.400	.150	.030
85/03/19	1000	WATER	0	40	1	80	.02	.030	.200	.040	.020
85/04/11	0945	WATER	0	42	6	93	.01K	.010	.300	.080	.050
85/05/16	1050	WATER	0	22	230	350	.57	.190	.700	.310	.060
85/06/20	0920	WATER	0	36	4	99	.18	.040	.800	.110	.060
85/07/17	1010	WATER	0	39	7	110	.04	.080	.500	.080	.030
85/08/26	1055	WATER	0.1	21	190	310	.32	.100	.500	.200	.030
85/09/20	1025	WATER	0.1	43	2	100	.44	.030	.300	.120	.070

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/13	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/12	1110	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/16	1050	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/26	1055	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02085079 ENO RIVER NEAR WEAVER, NC

LOCATION.--Lat36°04'19", long 78°51'47", Durham County, Hydrologic Unit 03020201, at bridge on Secondary Road 1004, 1.3 mi above Little River, and 1.5 mi northeast of Weaver.

DRAINAGE AREA.--148 mi^2.

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to September 1985.
WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the Falls Lake. Interruptions in the daily record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 293 microsiemens July 11, 1984, minimum, 32 microsiemens Aug. 18, 1985.
WATER TEMPERATURE: Maximum recorded, 30.5°C Aug. 23, 1983, minimum, 0.0°C on several days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 293 microsiemens July 11; minimum, 32 microsiemens Aug.18.
WATER TEMPERATURE: Maximum, 27.5°C July 21, 22; minimum, 0.0°C Jan. 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
23...	1325	10	165	6.8	21.0	20	762	4.7	53	110	100
DEC											
04...	1350	86	108	6.8	6.5	20	763	11.3	92	--	--
19...	1030	28	130	6.5	10.5	20	756	10.2	92	180	120
JAN											
03...	1145	862	80	6.4	9.5	190	757	11.3	100	--	--
FEB											
20...	1500	103	85	6.6	7.0	50	763	13.2	109	K32	K12
MAR											
26...	1030	116	90	6.4	9.0	20	765	11.6	100	--	--
APR											
30...	1300	30	122	7.3	18.5	15	761	7.3	78	130	K24
MAY											
23...	1000	1920	62	5.9	20.0	1000	750	8.1	91	--	--
JUN											
18...	1030	14	150	6.3	24.5	30	749	6.4	78	--	--
JUL											
22...	1315	2.7	200	7.1	27.0	25	762	5.8	73	--	--
AUG											
18...	1800	6950	37	5.8	23.0	360	750	8.2	97	--	--
SEP											
24...	1140	18	150	5.7	20.0	25	749	7.4	83	--	160

K Results based on colony count outside the acceptable range (non-ideal colony count).

NEUSE RIVER BASIN

02085079 ENO RIVER NEAR WEAVER, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT											
23...	42	0	9.8	4.3	14	40	1	3.2	11	12	.30
DEC											
04...	30	0	7.3	2.9	8.1	35	.7	2.5	7.1	8.0	.10
19...	35	2	8.3	3.4	10	37	.8	2.3	9.0	11	.10
JAN											
03...	27	2	6.2	2.7	5.4	29	.5	2.0	7.7	6.6	<.10
FEB											
20...	24	2	5.7	2.3	5.7	33	.5	1.4	8.1	6.8	<.10
MAR											
26...	27	0	6.4	2.6	6.7	34	.6	1.0	5.7	6.6	<.10
APR											
30...	33	0	7.7	3.3	9.8	38	.8	1.9	7.7	12	.20
MAY											
23...	19	8	4.7	1.7	3.4	26	.4	2.1	8.2	3.5	<.10
JUN											
18...	33	0	7.5	3.5	14	46	1	2.1	11	10	.30
JUL											
22...	39	0	8.5	4.2	23	54	2	3.7	19	16	.40
AUG											
18...	11	4	2.7	1.0	1.6	20	.2	2.3	4.4	2.5	<.10
SEP											
24...	35	5	8.4	3.4	13	42	1	2.8	9.7	10	.20

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)
OCT											
23...	11	108	96	.15	2.9	.97	.030	1.0	--	.060	--
DEC											
04...	12	77	69	.10	18	.39	.010	.40	--	.050	--
19...	11	78	76	.11	5.9	--	<.010	1.1	1.2	.040	<.010
JAN											
03...	7.8	72	53	.10	168	.37	.030	.40	--	.090	--
FEB											
20...	13	62	56	.08	17	.49	.010	.50	--	.040	--
MAR											
26...	9.3	60	54	.08	19	--	<.010	.20	--	<.010	--
APR											
30...	6.8	89	70	.12	7.2	.67	.030	.70	--	.100	--
MAY											
23...	7.8	48	38	.07	249	.69	.110	.80	.60	.450	.150
JUN											
18...	12	101	81	.14	3.8	1.1	.010	1.1	--	.020	--
JUL											
22...	10	124	110	.17	.90	2.2	.040	2.2	--	.080	--
AUG											
18...	4.5	51	23	.07	957	.24	.060	.30	.31	.230	.170
SEP											
24...	12	126	77	.17	6.1	--	<.010	.80	--	.030	--

NEUSE RIVER BASIN

02085079 ENO RIVER NEAR WEAVER, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT										
23...	--	.64	--	.70	--	--	1.7	7.5	--	.850
DEC										
04...	--	.45	--	.50	--	--	.90	4.0	--	.380
19...	--	.66	--	.70	.20	.50	1.8	8.0	1.7	.570
JAN										
03...	--	.81	--	.90	--	--	1.3	5.8	--	.290
FEB										
20...	--	.36	--	.40	--	--	.90	4.0	--	.100
MAR										
26...	--	--	--	.50	--	--	.70	3.1	--	.120
APR										
30...	--	.50	--	.60	--	--	1.3	5.8	--	.510
MAY										
23...	.19	2.6	--	3.0	--	--	3.8	17	--	.850
JUN										
18...	--	.58	--	.60	--	--	1.7	7.5	--	.710
JUL										
22...	--	.52	--	.60	--	--	2.8	12	--	1.50
AUG										
18...	.22	1.6	1.0	1.8	.60	1.2	2.1	9.3	1.5	.150
SEP										
24...	--	.77	--	.80	--	--	1.6	7.1	--	.540

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT										
23...	--	.840	--	--	<1	1	10	4	800	4
DEC										
04...	--	.290	--	--	<1	1	<10	3	1300	4
19...	.500	.490	.480	1.5	<1	<1	20	2	760	1
JAN										
03...	--	.170	--	--	1	<1	20	14	9500	14
FEB										
20...	--	.100	--	--	<1	1	10	12	1000	2
MAR										
26...	--	.090	--	--	<1	<1	<10	2	700	<1
APR										
30...	--	.410	--	--	<1	<1	<10	3	550	<1
MAY										
23...	.050	.190	.070	.21	<1	2	10	35	30000	33
JUN										
18...	--	.680	--	--	<1	<1	10	4	710	<1
JUL										
22...	--	1.50	--	--	1	<1	<10	6	430	2
AUG										
18...	<.010	.130	.020	.06	<1	<1	30	30	22000	26
SEP										
24...	--	.490	--	--	<1	1	10	4	400	6

02085079 ENO RIVER NEAR WEAVER, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT								
23...	90	<.1	<1	20	5.3	--	11	.30
DEC								
04...	70	.1	<1	30	4.9	--	76	18
19...	60	.9	<1	10	4.9	.04	7	.53
JAN								
03...	600	<.1	<1	40	12	--	328	763
FEB								
20...	50	<.1	<1	50	3.5	--	210	58
MAR								
26...	40	.4	<1	<10	3.7	--	14	4.4
APR								
30...	100	.1	<1	20	4.4	--	16	1.3
MAY								
23...	1800	.2	<1	120	9.1	.05	1670	8650
JUN								
18...	80	<.1	<1	10	6.1	--	13	.49
JUL								
22...	120	<.1	<1	110	17	--	9	.07
AUG								
18...	830	.1	<1	130	—	.06	825	15500
SEP								
26...	50	<.1	<1	40	4.8	--	5	.24

NEUSE RIVER BASIN

02085079 ENO RIVER NEAR WEAVER, NC

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	190	91	117	184	168	179	156	143	150	148	138	143
2	140	122	133	193	175	184	158	150	155	157	145	151
3	161	140	147	199	174	186	153	100	119	148	73	101
4	167	157	162	190	174	182	115	105	107	92	75	84
5	168	150	159	188	178	184	110	96	106	112	92	102
6	168	140	155	184	175	181	93	86	90	130	112	121
7	165	140	155	194	176	183	91	83	86	132	98	114
8	156	140	150	181	171	177	101	90	96	98	95	96
9	173	147	161	201	176	189	100	94	97	97	94	95
10	168	154	161	186	175	181	101	97	100	99	95	96
11	168	152	161	202	182	190	107	99	103	100	97	98
12	169	157	162	184	159	174	111	102	107	107	98	102
13	171	164	168	170	160	165	116	106	112	104	99	102
14	177	162	170	188	165	174	129	115	121	105	100	102
15	173	159	166	176	164	173	130	116	124	104	101	102
16	168	154	162	180	167	175	129	119	125	109	102	105
17	170	159	166	180	173	177	129	119	127	123	107	113
18	177	169	173	204	177	190	131	122	127	121	109	114
19	177	167	173	199	174	187	130	122	127	116	108	112
20	186	168	176	200	170	188	134	126	130	116	107	112
21	180	155	163	198	170	187	137	130	134	121	103	116
22	173	148	163	199	168	182	138	130	135	128	120	124
23	176	164	169	191	164	176	138	128	134	130	123	126
24	177	157	169	169	161	166	139	126	132	127	118	123
25	175	156	166	168	162	166	136	128	133	129	119	124
26	173	158	167	170	160	166	138	131	134	127	120	122
27	192	168	180	179	164	173	143	136	140	129	114	124
28	194	173	185	186	171	178	148	143	146	135	126	130
29	185	169	176	180	136	155	149	140	145	164	133	146
30	180	165	174	147	132	139	150	138	145	164	143	152
31	204	172	189	---	---	---	145	137	142	187	123	155
MONTH	204	91	164	204	132	177	158	83	124	187	73	116

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	116	69	78	90	86	87	101	95	99	129	122	125
2	76	68	71	90	87	88	103	96	100	133	125	128
3	71	63	66	91	87	89	105	98	101	134	106	120
4	70	66	67	91	89	90	104	98	101	119	105	111
5	78	70	73	93	90	91	104	99	102	115	103	106
6	79	75	77	91	87	89	105	100	103	105	100	103
7	79	73	75	94	90	91	106	102	104	107	100	104
8	77	73	74	95	92	94	109	104	106	108	101	105
9	74	73	74	95	93	94	110	104	108	112	103	107
10	76	73	75	97	94	96	113	106	110	115	108	111
11	84	77	80	98	95	96	113	109	111	117	108	113
12	86	71	76	98	95	96	115	109	112	117	109	114
13	72	71	72	97	93	94	113	108	111	115	106	112
14	75	73	73	96	93	95	113	107	110	115	109	112
15	77	75	76	96	92	94	113	110	112	120	114	117
16	79	77	78	97	91	95	116	112	114	123	89	103
17	82	79	80	99	92	96	119	111	115	97	86	90
18	83	81	82	99	91	95	114	111	113	99	91	94
19	85	83	84	100	93	96	138	110	116	108	97	103
20	87	85	86	100	94	97	146	134	140	107	101	105
21	90	86	88	98	94	96	138	111	119	108	101	105
22	92	89	90	105	99	103	143	109	120	107	94	101
23	96	90	92	107	100	102	147	115	124	109	57	76
24	99	96	98	102	95	98	124	116	120	---	---	---
25	101	97	98	103	93	98	126	118	123	---	---	---
26	106	86	94	92	89	91	129	121	126	---	---	---
27	90	84	87	92	90	91	128	121	125	---	---	---
28	88	83	85	92	89	91	128	121	126	---	---	---
29	---	---	---	95	92	93	126	119	123	---	---	---
30	---	---	---	99	94	96	127	120	123	---	---	---
31	---	---	---	100	96	97	---	---	---	---	---	---
MONTH	116	63	80	107	86	94	147	95	114	134	57	107

02085079 ENO RIVER NEAR WEAVER, NC

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	113	102	108	224	151	192	140	86	129	73	61	66
2	153	108	120	156	138	144	117	84	107	83	73	77
3	156	132	148	161	152	157	113	94	101	90	83	86
4	128	114	121	168	149	157	109	101	106	98	76	89
5	127	117	123	170	165	169	119	102	115	84	77	80
6	129	119	125	177	170	173	148	112	125	90	83	86
7	133	120	128	183	177	180	151	136	141	98	82	89
8	134	121	129	182	177	179	149	133	141	102	91	97
9	138	122	132	212	181	189	152	92	107	105	96	101
10	134	121	130	286	214	247	111	93	100	108	102	104
11	136	122	133	293	211	265	122	116	121	111	99	105
12	142	125	136	210	194	202	135	117	129	116	107	112
13	174	128	151	199	191	195	138	126	132	126	114	119
14	149	129	140	207	199	204	143	130	137	130	111	124
15	150	140	144	210	197	205	154	135	145	152	112	136
16	171	151	163	199	187	195	247	155	196	144	124	133
17	169	154	162	200	153	165	267	248	260	141	119	131
18	164	150	158	159	144	152	253	32	102	130	118	125
19	171	150	164	167	159	163	60	37	52	132	123	129
20	160	145	154	182	167	173	74	56	68	138	129	136
21	167	153	159	201	182	190	65	51	60	146	132	141
22	175	162	169	209	201	204	70	62	67	161	136	152
23	172	150	162	217	146	175	76	71	73	157	144	152
24	173	159	169	147	142	144	81	76	78	156	139	148
25	176	170	173	188	103	139	93	75	81	147	126	136
26	181	175	178	150	106	127	81	77	79	136	128	133
27	187	177	180	165	147	157	87	81	83	142	130	137
28	210	186	194	103	77	87	86	82	84	149	135	142
29	213	204	209	112	88	97	89	84	86	158	133	149
30	209	202	204	126	110	117	98	90	94	155	139	148
31	---	---	---	133	116	125	100	60	77	---	---	---
MONTH	213	102	152	293	77	170	267	32	109	161	61	119
YEAR	293	32	128									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	15.5	16.0	19.5	18.5	19.0	6.0	5.5	6.0	12.0	10.0	11.0
2	15.5	14.5	15.0	19.0	18.0	18.5	6.5	4.5	5.5	13.0	12.0	12.5
3	14.5	13.0	13.5	17.5	14.5	16.5	7.5	6.5	7.0	12.5	8.0	10.0
4	15.5	13.5	14.5	14.5	14.0	14.0	6.5	6.0	6.5	8.0	7.0	7.5
5	16.0	14.5	15.5	15.5	14.5	15.0	6.5	6.0	6.0	7.5	7.0	7.0
6	17.0	16.0	16.5	15.0	13.0	14.0	6.0	5.5	6.0	7.0	6.5	6.5
7	17.0	16.0	16.5	12.5	10.5	11.5	5.5	3.5	4.0	6.5	6.0	6.0
8	17.5	16.5	17.0	10.5	9.0	9.5	4.0	2.5	3.5	6.0	5.0	5.5
9	17.5	16.5	17.0	9.5	8.5	9.0	4.0	2.0	3.0	5.0	4.5	4.5
10	18.0	17.0	17.5	10.0	8.5	9.0	5.0	3.0	4.0	4.5	4.0	4.0
11	18.0	17.0	17.5	12.0	10.0	11.5	6.5	5.0	5.5	5.0	3.5	4.0
12	17.5	16.5	17.0	12.0	9.5	10.5	6.5	5.5	6.0	4.5	3.0	3.5
13	17.0	16.5	17.0	9.0	7.5	8.0	7.5	6.5	7.0	3.5	2.5	3.0
14	17.0	15.5	16.5	7.5	7.0	7.5	8.0	7.0	7.5	3.0	1.5	2.5
15	16.5	15.0	16.0	7.5	7.0	7.0	9.0	7.5	8.5	3.0	1.5	2.5
16	17.5	16.0	16.5	9.5	7.5	8.5	9.5	8.5	9.0	2.5	1.0	2.0
17	18.0	17.0	17.5	8.5	7.0	8.0	10.0	9.5	9.5	3.0	2.0	2.5
18	19.0	18.0	18.5	6.5	6.0	6.5	11.0	9.5	10.0	3.5	2.0	3.0
19	20.5	18.5	19.5	7.5	6.5	7.0	12.0	10.0	11.0	5.0	3.0	4.0
20	20.5	19.0	20.0	7.0	6.0	7.0	11.5	11.0	11.5	4.5	1.0	3.0
21	21.0	20.0	20.5	6.0	4.5	5.5	12.5	11.5	12.0	1.5	.5	1.0
22	21.0	20.0	20.5	4.5	4.0	4.5	13.0	12.5	13.0	.5	.5	.5
23	21.5	20.5	21.0	4.5	3.5	4.0	12.0	9.5	10.5	.5	.5	.5
24	21.0	20.5	21.0	4.5	4.0	4.0	9.5	8.0	8.5	1.0	.5	.5
25	21.0	20.0	20.5	5.0	4.0	4.5	10.5	9.0	9.5	1.5	.5	1.0
26	20.0	19.5	19.5	5.5	4.0	5.0	9.0	7.0	7.5	1.0	.0	.5
27	19.5	18.5	19.0	6.5	4.5	5.5	9.0	7.5	8.5	1.0	.5	.5
28	20.5	19.0	20.0	9.0	6.5	8.0	9.5	8.0	9.0	1.0	.5	1.0
29	21.5	20.5	21.0	8.5	6.5	7.0	10.5	8.5	9.5	2.0	.5	1.0
30	21.0	20.0	20.5	6.5	5.5	6.0	11.0	9.5	10.5	2.5	1.0	1.5
31	20.0	19.5	20.0	---	---	---	11.0	10.5	11.0	4.5	1.5	2.5
MONTH	21.5	13.0	18.0	19.5	3.5	9.0	13.0	2.0	8.0	13.0	.0	3.5

NEUSE RIVER BASIN

02085079 ENO RIVER NEAR WEAVER, NC

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	4.5	5.5	10.0	9.0	9.0	18.5	16.0	17.0	20.5	17.5	19.0
2	6.5	6.0	6.5	11.0	9.0	9.5	16.5	14.0	15.5	20.0	19.0	19.5
3	6.5	5.5	6.0	11.0	9.0	10.0	16.0	12.0	14.0	20.0	17.0	18.5
4	5.5	5.0	5.0	11.5	9.5	10.5	17.0	13.0	15.0	17.5	16.0	17.0
5	5.0	4.5	4.5	14.0	11.5	12.5	18.5	15.0	17.0	18.5	16.0	17.0
6	5.0	4.0	4.5	12.5	10.5	11.5	18.5	16.5	17.5	19.5	17.0	18.0
7	5.5	5.0	5.0	10.5	9.0	10.0	18.0	15.5	16.5	20.5	18.5	19.5
8	5.0	4.0	4.5	12.0	9.0	10.5	16.5	14.0	15.0	20.0	19.0	19.5
9	4.0	2.0	3.0	12.5	11.5	12.0	14.0	12.0	13.0	18.5	17.5	18.0
10	3.0	2.0	2.5	12.5	10.5	11.0	13.0	10.5	11.5	20.0	18.0	19.0
11	4.0	2.5	3.0	10.5	9.5	10.0	14.5	11.0	12.5	21.0	19.5	20.0
12	6.0	4.0	5.0	13.0	10.0	11.5	16.5	13.5	14.5	21.0	20.0	20.5
13	5.0	4.5	5.0	13.5	10.5	11.5	17.5	14.5	16.0	22.0	20.0	21.0
14	4.5	4.0	4.5	12.5	10.5	11.5	17.0	16.5	17.0	23.0	21.0	22.0
15	4.5	3.5	4.0	13.5	10.5	11.5	17.0	16.0	16.5	23.0	22.0	22.5
16	4.0	2.5	3.5	12.0	9.0	11.0	18.0	16.5	17.0	23.0	21.0	21.5
17	4.5	3.5	4.0	12.5	10.5	11.5	19.0	16.5	17.5	21.0	20.5	21.0
18	5.0	4.0	4.5	11.5	9.0	10.5	19.0	16.0	17.5	20.5	19.5	20.0
19	6.5	4.5	5.5	10.5	7.5	9.0	22.0	17.0	18.5	21.0	19.0	20.0
20	7.5	6.0	6.5	11.5	8.0	10.0	21.0	17.5	19.0	21.0	19.5	20.0
21	7.0	5.0	6.5	11.0	9.0	10.0	21.5	18.5	20.0	22.5	21.0	21.5
22	8.5	6.0	7.0	10.0	8.0	8.5	21.5	19.0	20.0	22.0	21.5	21.5
23	9.5	7.5	8.5	9.5	7.0	8.5	21.0	18.5	20.0	21.5	19.5	20.0
24	12.5	9.0	10.5	10.5	9.0	10.0	21.0	19.0	20.0	20.0	18.5	19.0
25	13.0	12.0	12.5	10.5	9.0	10.0	21.5	19.5	20.5	19.5	17.5	18.5
26	13.0	12.0	12.5	11.5	9.0	10.0	21.0	18.5	20.0	20.5	18.5	19.5
27	12.5	11.5	12.0	13.0	9.5	11.0	20.5	19.0	20.0	21.5	19.0	20.0
28	11.5	9.5	10.5	15.5	11.0	13.5	21.5	19.5	20.5	22.0	20.0	21.0
29	---	---	---	18.0	14.5	16.0	20.5	19.5	20.0	22.0	21.0	21.0
30	---	---	---	20.0	17.0	18.5	19.5	17.5	18.5	21.0	20.5	21.0
31	---	---	---	18.5	17.0	17.5	---	---	---	22.0	20.5	21.0
MONTH	13.0	2.0	6.0	20.0	7.0	11.0	22.0	10.5	17.5	23.0	16.0	20.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	21.5	22.5	22.0	21.5	21.5	26.0	25.5	25.5	23.0	22.0	22.5
2	23.5	22.5	23.0	22.5	21.5	22.0	26.0	24.5	25.0	24.0	22.5	23.0
3	24.0	22.5	23.5	23.5	22.0	22.5	24.5	23.0	23.5	24.5	23.0	23.5
4	24.5	23.0	24.0	24.5	22.0	23.0	23.5	22.5	23.0	25.0	23.5	24.0
5	25.5	24.0	25.0	24.5	23.0	23.5	23.0	22.0	22.5	25.5	24.0	25.0
6	25.5	24.5	25.0	25.0	23.5	24.0	23.5	22.0	23.0	25.5	24.5	25.0
7	25.0	24.0	24.0	26.0	23.5	24.5	25.0	23.0	24.0	25.5	25.0	25.0
8	24.0	23.0	23.5	26.0	23.0	24.5	24.5	24.0	24.0	26.0	25.0	25.5
9	25.0	23.5	24.0	26.0	23.0	24.5	25.0	24.0	24.5	26.0	25.0	25.5
10	25.5	24.5	25.0	25.5	23.5	24.5	25.0	24.5	25.0	26.5	25.5	26.0
11	26.0	25.5	25.5	26.0	23.5	24.5	25.0	24.5	25.0	26.0	25.5	25.5
12	25.5	24.5	25.5	26.0	24.0	25.0	26.0	25.0	25.0	25.0	23.0	24.0
13	24.5	22.0	23.5	26.0	24.0	25.0	26.5	25.0	25.5	22.5	21.0	21.5
14	22.0	21.0	21.5	25.5	24.5	25.0	27.0	25.0	26.0	21.0	18.5	19.5
15	22.0	21.0	21.5	26.5	24.5	25.5	26.5	25.0	25.5	19.0	17.5	18.0
16	23.5	22.0	23.0	26.5	25.0	25.5	26.0	24.5	25.5	18.5	17.0	18.0
17	24.5	22.5	23.5	26.0	25.0	25.5	25.0	24.5	24.5	18.5	17.0	18.0
18	25.5	23.5	24.5	26.0	24.5	25.5	24.5	23.0	23.5	18.5	17.5	18.0
19	25.5	24.5	25.0	26.0	24.5	25.0	24.0	23.0	23.5	19.0	17.5	18.0
20	25.0	23.5	24.0	26.5	24.5	25.5	24.0	23.0	23.5	19.5	18.5	19.0
21	24.0	22.5	23.0	27.5	25.0	26.0	23.5	22.0	22.5	19.5	19.5	19.5
22	24.0	22.0	23.0	27.5	26.0	26.5	23.0	22.5	23.0	20.5	19.5	20.0
23	24.5	22.5	23.5	26.0	25.0	25.5	23.0	22.0	22.5	20.0	20.0	20.0
24	25.5	23.0	24.5	25.0	24.0	24.5	22.5	22.0	22.0	20.5	20.0	20.0
25	26.0	24.0	24.5	24.0	23.5	24.0	22.5	21.5	22.0	21.0	20.0	20.5
26	25.5	24.0	24.5	25.0	24.0	24.5	23.0	22.0	22.5	20.0	19.5	19.5
27	24.5	22.5	23.5	25.0	24.5	24.5	23.5	22.5	23.0	19.5	19.5	19.5
28	23.0	21.5	22.0	24.0	23.5	23.5	23.5	23.0	23.5	19.5	18.0	18.5
29	22.5	21.5	22.0	23.5	23.0	23.5	24.0	23.0	23.5	18.0	16.5	17.5
30	22.0	21.5	22.0	25.0	23.0	24.0	24.5	23.5	24.0	17.5	16.5	17.0
31	---	---	---	26.0	24.5	25.0	24.0	22.0	23.0	---	---	---
MONTH	26.0	21.0	23.5	27.5	21.5	24.5	27.0	21.5	24.0	26.5	16.5	21.0
YEAR	27.5	.0	15.5									

NEUSE RIVER BASIN

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC

LOCATION.--Lat 36°08'20", long 78°54'24", Durham County, Hydrologic Unit 03020201, on right bank 125 ft upstream from bridge on U.S. Highway 501, 1 mi upstream from Mountain Creek, and 1.2 mi northwest of Orange Factory.

DRAINAGE AREA.--80.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1930, 1954-59, 1961. September 1961 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 333.98 ft above National Geodetic Vertical Datum of 1929 (levels by North Carolina State Highway Commission).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--24 years, 74.0 ft^3/s, 12.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,070 ft^3/s Oct. 25, 1971, gage height, 12.56 ft from high-water mark in well; minimum, 0.01 ft^3/s Sept. 3-7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A field estimate of 0.03 ft^3/s was made on Sept. 18, 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	0400	2,590	6.19	Aug. 18	2100	2,260	5.74
Feb. 2	0700	1,800	5.08	Aug. 31	1130	*3,790	*7.66

Minimum discharge, 1.4 ft^3/s July 22, gage height, 0.43 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	9.2	13	13	1660	80	23	12	13	5.4	8.2	172
2	28	8.8	10	15	1300	69	21	11	12	9.2	8.5	87
3	13	7.9	85	634	344	60	20	65	13	9.1	10	50
4	9.9	8.1	44	823	187	54	19	45	12	7.0	8.4	35
5	8.3	8.4	48	346	147	53	20	20	12	6.1	6.2	26
6	7.4	8.3	203	128	277	47	18	14	11	5.3	5.3	21
7	6.6	8.4	72	84	250	40	18	13	11	5.5	4.8	18
8	6.3	8.0	42	68	141	39	18	11	11	4.6	4.5	16
9	6.2	7.7	31	58	100	40	18	11	12	3.7	5.0	15
10	6.3	6.9	26	e50	83	38	18	11	11	3.1	8.9	13
11	6.0	8.7	e21	e44	75	36	18	12	9.9	2.9	12	12
12	5.5	12	e19	e39	483	35	18	12	9.1	2.6	7.9	11
13	5.5	10	e17	e35	237	33	18	11	11	2.4	6.1	11
14	5.3	7.7	e16	e31	128	33	18	11	11	2.5	5.3	11
15	5.3	6.7	e16	e27	91	34	21	9.9	9.7	2.4	4.4	9.1
16	e5.4	6.0	e15	25	76	33	22	25	9.0	2.3	4.0	8.9
17	e5.4	6.0	e15	25	65	37	51	23	16	2.1	3.6	8.5
18	e5.5	6.3	e14	29	54	38	28	22	12	2.0	972	8.3
19	e5.5	7.8	14	28	50	30	23	16	9.8	1.9	333	8.1
20	e5.4	9.1	14	28	47	21	20	12	8.5	1.8	88	7.8
21	e8.0	8.8	15	75	43	24	18	13	7.9	1.7	255	7.3
22	e11	9.1	15	e69	41	29	17	14	6.8	1.7	91	7.8
23	e9.2	8.0	16	e50	39	43	16	354	5.9	2.4	37	7.8
24	7.8	7.5	16	e35	38	57	16	76	5.1	2.0	21	8.5
25	8.2	7.7	15	25	39	91	15	46	4.9	5.9	76	7.9
26	7.6	8.0	14	30	293	61	15	27	4.5	18	205	7.1
27	7.2	9.2	15	33	203	45	15	18	4.2	21	63	5.9
28	7.5	10	13	22	106	35	14	15	3.9	96	118	5.4
29	7.5	17	14	24	---	26	13	14	3.7	25	65	5.2
30	8.1	19	13	27	---	23	13	13	3.9	13	38	4.8
31	9.7	---	13	134	---	22	---	13	---	11	1490	---
TOTAL	323.6	266.3	894	3054	6597	1306	582	969.9	274.8	279.6	3965.1	616.4
MEAN	10.4	8.88	28.8	98.5	236	42.1	19.4	31.3	9.16	9.02	128	20.5
MAX	85	19	203	823	1660	91	51	354	16	96	1490	172
MIN	5.3	6.0	10	13	38	21	13	9.9	3.7	1.7	3.6	4.8
CFSM	.13	.11	.36	1.23	2.94	.52	.24	.39	.11	.11	1.59	.25
IN.	.15	.12	.41	1.41	3.05	.60	.27	.45	.13	.13	1.83	.29

CAL YR 1984	TOTAL	38449.6	MEAN	105	MAX	2600	MIN	3.9	CFSM 1.31	IN.	17.79
WTR YR 1985	TOTAL	19128.7	MEAN	52.4	MAX	1660	MIN	1.7	CFSM .65	IN.	8.85

e Estimated

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-63, 1972-73, 1977-79, October 1984 to September 1985.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1984 to September 1985.
WATER TEMPERATURE: October 1984 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1984 to September 1985.

REMARKS.--Station operated to define the chemical-quality charactistics of inflow into the Falls Lake. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemcial and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 123 microsiemens July 22; minimum, 37 microsiemens Aug. 18.
WATER TEMPERATURE: Maximum, 29.5°C July 21, Aug. 14; minimum, 0.0°C on several days during January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
23...	1210	9.5	107	6.8	20.5	15	759	7.4	83	440	640
DEC											
04...	1230	43	82	6.7	6.0	40	761	11.7	94	--	--
19...	1200	14	90	6.0	11.0	20	751	11.6	107	K26	K20
JAN											
03...	1100	342	75	6.4	9.0	95	756	11.4	99	--	--
FEB											
20...	1300	48	68	6.6	7.5	50	763	11.8	98	80	K28
MAR											
26...	1155	60	75	6.2	10.0	40	762	12.5	111	--	--
APR											
30...	1145	13	95	7.4	17.5	10	759	10.1	106	K12	K12
MAY											
23...	1145	240	50	5.8	20.5	560	747	8.9	101	--	--
JUN											
18...	1205	12	95	6.1	24.0	25	747	8.6	104	--	--
JUL											
22...	1145	1.6	122	7.6	27.0	15	760	6.7	84	--	--
AUG											
18...	1845	2050	40	6.4	24.0	360	749	9.2	111	--	--
SEP											
24...	1300	7.9	95	6.0	20.0	10	749	9.6	108	--	K60

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
23...	37	0	8.8	3.6	5.5	23	.4	2.8	3.3	6.2	<.10
DEC											
04...	25	0	5.8	2.5	5.0	28	.5	2.6	4.7	6.3	<.10
19...	29	1	7.0	2.8	5.1	26	.4	2.0	5.5	6.2	<.10
JAN											
03...	22	0	5.4	2.1	4.0	26	.4	1.8	5.2	6.8	<.10
FEB											
20...	20	1	4.8	2.0	4.1	29	.4	1.2	5.7	5.2	<.10
MAR											
26...	23	0	5.5	2.3	5.0	30	.5	1.3	4.6	5.6	<.10
APR											
30...	31	0	7.6	3.0	5.6	27	.4	1.3	2.6	5.2	<.10
MAY											
23...	16	6	3.9	1.5	2.3	21	.3	2.3	9.1	2.8	<.10
JUN											
18...	32	0	7.7	3.1	5.3	25	.4	1.5	2.9	5.0	<.10
JUL											
22...	41	0	10	3.8	6.1	24	.4	2.0	3.1	5.2	.10
AUG											
18...	12	3	3.1	1.1	1.6	18	.2	2.5	3.2	2.5	<.10
SEP											
24...	--	--	--	--	--	--	--	--	2.4	5.0	<.10

K Results based on colony count outside the acceptable range (non-ideal colony count).

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT											
23...	12	79	71	.11	2.0	--	.010	<.10	--	<.010	--
DEC											
04...	12	66	56	.09	7.7	.09	.010	.10	--	.020	--
19...	13	58	58	.08	2.2	.28	.020	.30	.27	<.010	<.010
JAN											
03...	8.9	63	47	.09	58	.19	.010	.20	--	.090	--
FEB											
20...	13	54	47	.07	7.0	.59	.010	.60	--	<.010	--
MAR											
26...	10	53	48	.07	8.6	--	<.010	.30	--	<.010	--
APR											
30...	11	62	57	.08	2.2	.38	.020	.40	--	.110	--
MAY											
23...	6.4	35	35	.05	23	.62	.080	.70	.48	.330	.150
JUN											
18...	12	69	58	.09	2.2	--	<.010	.40	--	<.010	--
JUL											
22...	8.4	64	70	.09	.28	--	<.010	<.10	--	.120	--
AUG											
18...	4.8	52	24	.07	288	.58	.020	.60	.25	.080	.070
SEP											
24...	--	56	--	.08	1.2	--	<.010	.50	--	.010	--

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	NITRO- GEN DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT										
23...	--	--	--	.50	--	--	--	--	--	.070
DEC										
04...	--	.68	--	.70	--	--	.80	3.5	--	.070
19...	--	--	--	.70	.20	.50	1.0	4.4	.77	<.010
JAN										
03...	--	1.0	--	1.1	--	--	1.3	5.8	--	.160
FEB										
20...	--	--	--	.70	--	--	1.3	5.8	--	.030
MAR										
26...	--	--	--	.20	--	--	.50	2.2	--	.010
APR										
30...	--	.99	--	1.1	--	--	1.5	6.6	--	.140
MAY										
23...	.19	.67	--	1.0	--	--	1.7	7.5	--	.250
JUN										
18...	--	--	--	.30	--	--	.70	3.1	--	.120
JUL										
22...	--	.68	--	.80	--	--	--	--	--	.110
AUG										
18...	.09	2.1	1.1	2.2	1.0	1.2	2.8	12	1.5	.130
SEP										
24...	--	.29	--	.30	--	--	.80	3.5	--	.080

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT										
23...	--	.040	--	--	<1	1	10	<1	480	2
DEC										
04...	--	.030	--	--	<1	<1	<10	2	1700	1
19...	<.010	<.010	<.010	--	<1	<1	10	1	610	2
JAN										
03...	--	.040	--	--	1	<1	20	5	7400	6
FEB										
20...	--	.020	--	--	<1	<1	10	2	830	<1
MAR										
26...	--	.020	--	--	<1	<1	20	2	1100	2
APR										
30...	--	.070	--	--	<1	1	10	1	380	<1
MAY										
23...	.100	.130	.080	.25	<1	<1	10	8	7700	16
JUN										
18...	--	.050	--	--	<1	<1	10	2	510	<1
JUL										
22...	--	.040	--	--	<1	1	<10	5	970	4
AUG										
18...	.020	.130	.030	.09	<1	<1	10	17	16000	18
SEP										
24...	--	.010	--	--	<1	1	10	2	430	6

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT								
23...	20	<.1	<1	10	4.9	--	13	.33
DEC								
04...	30	.1	<1	20	6.0	--	21	2.4
19...	30	--	<1	10	4.5	.03	3	.11
JAN								
03...	700	<.1	<1	30	10	--	188	174
FEB								
20...	20	.2	<1	30	3.9	--	25	3.2
MAR								
26...	10	<.1	<1	<10	4.7	--	9	1.5
APR								
30...	40	.3	<1	10	3.7	--	5	.18
MAY								
23...	480	.1	<1	10	14	.05	406	263
JUN								
18...	20	<.1	<1	10	6.2	--	11	.36
JUL								
22...	110	<.1	<1	60	34	--	14	.06
AUG								
18...	850	<.1	<1	100	16	.07	608	3370
SEP								
24...	20	<.1	<1	40	3.6	--	1	.02

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	114	112	113	90	89	90	96	93	94
2	---	---	---	114	112	113	90	81	89	95	88	93
3	---	---	---	114	110	113	85	75	79	90	66	75
4	78	75	77	112	109	111	83	80	82	67	57	62
5	83	77	80	111	110	110	83	77	81	59	56	58
6	84	81	83	112	110	111	84	74	77	63	60	62
7	85	83	84	112	109	111	76	75	75	67	63	65
8	86	84	85	111	109	110	77	76	77	69	67	68
9	88	85	86	110	108	109	78	77	78	71	69	70
10	90	87	88	110	107	109	80	79	79	73	71	72
11	92	89	90	108	102	104	80	80	80	74	73	74
12	94	91	92	106	103	104	83	81	82	75	74	75
13	96	92	94	105	102	103	84	82	83	77	75	76
14	98	95	97	104	101	103	87	84	85	78	76	78
15	100	97	99	103	101	102	87	86	87	79	78	78
16	101	98	100	102	101	102	88	87	88	79	78	78
17	102	99	101	103	101	102	90	88	89	79	78	78
18	103	100	102	101	99	101	90	88	90	82	79	80
19	104	102	103	100	95	97	91	89	90	80	79	80
20	105	104	105	97	96	96	92	90	91	80	71	78
21	107	105	107	96	95	96	93	91	92	87	73	80
22	108	106	108	97	95	96	93	91	92	89	87	88
23	109	106	107	96	94	95	93	92	93	89	87	88
24	109	107	108	96	94	95	94	92	93	88	84	86
25	111	108	110	96	94	95	93	92	93	84	81	83
26	113	110	111	96	94	95	94	92	93	82	81	81
27	113	110	111	95	92	94	93	90	91	84	68	79
28	113	111	112	93	87	91	92	90	91	81	79	80
29	113	111	112	92	89	91	92	90	91	78	76	77
30	116	110	114	93	90	91	93	91	92	76	75	76
31	114	112	113	---	---	---	95	93	94	88	69	74
MONTH	116	75	99	114	87	102	95	74	87	96	56	77

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	60	55	57	67	66	67	---	---	---	90	84	87
2	56	54	55	68	66	67	82	78	80	93	87	90
3	57	54	56	69	67	68	83	78	80	90	78	85
4	60	57	59	69	68	69	83	79	81	83	78	81
5	64	60	62	70	68	69	84	79	81	82	79	80
6	66	61	63	71	69	70	85	80	82	84	81	82
7	62	60	61	71	69	70	86	81	84	83	80	82
8	62	61	62	71	69	70	86	82	84	84	81	83
9	64	62	63	71	70	71	86	82	84	85	82	84
10	65	63	64	73	70	72	86	81	84	85	82	84
11	66	64	65	75	73	73	85	81	84	85	83	84
12	65	56	59	75	72	73	86	81	84	87	83	85
13	57	56	57	76	74	75	87	82	85	87	81	85
14	60	57	58	76	75	75	88	84	86	88	82	86
15	61	59	61	77	75	76	89	84	87	88	81	85
16	63	62	63	78	75	76	89	82	87	86	80	82
17	65	63	64	---	---	---	89	86	87	85	81	83
18	66	65	66	---	---	---	91	86	89	84	80	82
19	67	66	66	---	---	---	89	86	87	84	79	82
20	68	67	67	---	---	---	92	87	89	80	74	77
21	69	67	68	---	---	---	91	85	88	80	74	78
22	69	68	69	---	---	---	91	86	89	80	65	77
23	69	68	69	---	---	---	92	87	90	68	49	55
24	70	69	69	---	---	---	92	89	90	64	60	62
25	70	68	70	---	---	---	92	87	90	71	65	68
26	70	64	67	76	75	76	93	85	90	76	72	74
27	67	65	66	76	75	76	92	90	91	79	77	78
28	66	65	66	78	76	77	92	89	91	83	80	81
29	---	---	---	80	77	78	91	87	90	85	82	84
30	---	---	---	81	78	79	91	85	88	87	85	86
31	---	---	---	---	---	---	---	---	---	88	85	87
MONTH	70	54	63	81	66	73	93	78	86	93	49	81

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	89	85	87	103	100	102	85	80	83	52	46	49
2	91	87	89	101	98	100	84	81	83	57	53	55
3	92	86	90	100	98	100	85	82	83	62	57	60
4	92	86	90	102	99	101	84	80	82	66	62	64
5	94	87	91	103	100	102	82	79	81	68	66	67
6	96	89	93	104	100	102	84	80	82	72	69	70
7	97	91	95	104	100	101	85	82	83	74	71	73
8	99	91	95	103	96	101	87	82	85	77	73	75
9	101	93	98	100	96	98	86	83	84	78	75	77
10	104	90	97	102	98	100	88	83	85	82	76	79
11	102	94	99	104	99	101	89	82	86	84	78	82
12	103	96	100	107	103	104	86	79	83	85	83	84
13	102	96	100	108	105	106	86	81	83	86	81	84
14	103	95	100	109	100	106	87	82	84	87	83	86
15	103	95	99	111	105	108	88	84	87	88	83	86
16	104	95	100	112	107	110	92	86	89	89	84	87
17	100	94	97	112	108	110	92	88	91	90	85	88
18	98	93	95	114	110	112	87	37	54	91	85	89
19	96	91	94	114	109	112	46	39	42	93	86	90
20	97	90	94	116	112	114	50	46	48	94	89	92
21	98	92	95	119	115	117	56	47	49	95	89	93
22	97	92	95	123	117	120	56	51	54	96	93	95
23	99	94	96	119	117	118	60	57	58	97	93	95
24	101	96	98	119	115	117	63	60	61	98	92	96
25	102	94	97	116	101	108	68	60	63	96	92	94
26	100	95	97	102	89	93	59	54	57	97	94	95
27	100	96	99	93	56	87	62	56	59	95	92	94
28	100	98	100	78	53	66	69	62	65	97	93	95
29	102	99	101	70	63	67	68	67	68	98	93	96
30	104	101	102	76	70	73	69	61	68	100	93	96
31	---	---	---	82	76	78	65	42	48	---	---	---
MONTH	104	85	96	123	53	101	92	37	72	100	46	83
YEAR	123	37	85									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	19.0	18.0	18.5	6.0	4.5	5.5	12.0	9.5	11.0
2	---	---	---	19.5	17.5	18.5	6.0	4.0	5.0	12.5	11.0	12.0
3	---	---	---	17.0	14.5	15.5	7.0	6.0	7.0	11.5	7.0	9.0
4	16.5	14.5	15.5	14.5	13.0	14.0	6.5	5.5	6.0	7.0	6.0	6.5
5	18.0	13.5	15.5	16.0	14.0	14.5	6.0	5.5	6.0	6.5	6.0	6.0
6	18.0	15.0	16.5	14.5	12.0	13.5	6.0	4.5	5.5	6.0	4.5	5.0
7	18.0	15.0	16.5	11.5	9.5	11.0	4.5	2.5	3.0	5.5	4.0	5.0
8	18.5	16.0	17.0	9.5	8.0	9.0	3.5	2.0	2.5	5.0	4.0	4.5
9	18.5	15.5	17.5	9.5	7.5	8.5	3.5	2.0	2.5	4.5	3.5	4.0
10	18.5	17.0	18.0	9.5	7.5	9.0	5.0	3.0	4.0	3.5	2.5	3.0
11	18.5	17.0	18.0	12.5	10.0	11.0	7.0	5.0	6.0	4.0	2.5	3.0
12	18.5	16.0	17.5	10.5	8.0	9.5	6.5	5.5	6.0	2.5	2.0	2.0
13	18.0	15.0	16.5	8.0	7.0	7.5	7.5	5.5	6.5	2.5	1.0	2.0
14	18.0	14.5	16.0	7.5	6.5	7.0	8.5	6.5	7.5	2.5	1.0	2.0
15	17.5	14.0	16.0	7.5	6.0	7.0	9.5	7.5	8.5	2.0	.5	1.5
16	18.5	16.5	17.5	9.5	7.5	8.5	9.5	8.0	9.0	1.5	.0	.5
17	19.0	17.5	18.0	7.5	6.0	7.0	10.5	9.5	9.5	2.0	1.0	1.5
18	20.0	18.0	19.0	7.0	5.0	6.0	11.0	9.0	10.0	3.0	1.0	2.0
19	20.5	18.5	19.5	7.0	7.0	7.0	12.0	10.0	11.0	4.5	2.5	3.5
20	21.0	18.5	20.0	7.0	5.0	6.5	12.0	11.0	11.5	3.5	.0	2.0
21	21.0	19.0	20.0	4.5	3.5	4.0	12.5	11.5	12.0	.0	.0	.0
22	21.5	19.0	20.0	4.0	3.0	3.5	12.5	11.0	12.0	.0	.0	.0
23	21.5	20.0	20.5	4.0	2.0	3.0	11.0	8.0	9.5	.0	.0	.0
24	21.5	19.5	20.5	3.5	1.5	3.0	8.0	6.5	7.5	.0	.0	.0
25	20.5	19.0	19.5	4.0	2.0	3.0	9.0	7.0	8.0	.5	.0	.0
26	20.5	18.0	19.0	4.5	3.0	4.0	7.0	5.5	6.5	.0	.0	.0
27	20.0	17.5	18.5	6.5	3.5	5.0	8.5	6.5	7.5	.0	.0	.0
28	21.5	19.0	20.0	9.0	6.5	7.5	9.0	7.0	8.0	.0	.0	.0
29	22.0	20.0	21.0	7.0	5.5	6.5	10.0	7.5	8.5	.5	.0	.0
30	21.0	19.5	20.0	6.5	4.5	5.5	11.0	8.5	9.5	1.0	.0	.5
31	20.5	19.0	19.5	---	---	---	10.5	10.0	10.5	4.5	.5	1.5
MONTH	22.0	13.5	18.5	19.5	1.5	8.5	12.5	2.0	7.5	12.5	.0	3.0

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.0	4.5	4.5	9.0	7.5	8.5	18.0	14.5	16.5	22.5	17.0	19.5
2	5.5	5.0	5.0	11.0	8.0	9.5	16.0	12.5	14.0	20.0	18.5	19.5
3	5.5	4.5	5.0	10.5	8.5	9.5	15.0	10.5	12.5	19.0	15.5	18.0
4	4.5	4.0	4.0	11.5	9.5	10.5	17.5	11.5	14.5	18.0	14.5	16.0
5	4.0	3.5	4.0	14.0	11.5	12.5	19.0	14.0	16.5	20.0	14.0	17.0
6	5.0	3.5	4.0	12.0	9.0	11.0	19.5	16.0	17.5	22.0	15.5	19.0
7	5.0	4.0	4.5	9.5	7.0	8.5	18.5	14.0	16.0	23.0	18.0	20.5
8	4.0	2.0	3.0	12.0	7.5	10.0	15.5	12.5	13.5	20.5	18.5	19.5
9	2.0	.5	1.5	12.5	10.5	11.5	13.5	10.0	11.5	20.0	17.0	18.5
10	3.5	1.0	2.0	12.0	9.0	10.5	13.5	8.0	10.5	22.0	18.5	20.0
11	4.5	2.0	3.0	9.5	8.5	9.0	15.0	9.5	12.0	22.0	19.5	20.5
12	6.0	4.0	5.0	13.0	9.0	11.0	17.5	12.0	15.0	22.5	20.0	21.0
13	4.5	3.5	4.0	13.0	9.5	11.0	19.0	14.0	16.5	25.0	20.5	22.5
14	4.5	3.0	4.0	12.0	10.5	11.5	17.5	16.0	17.0	26.5	21.5	24.0
15	4.5	2.5	3.5	13.0	10.0	11.0	18.0	16.0	17.0	26.0	22.5	24.0
16	4.0	2.0	3.0	11.5	8.0	10.0	19.5	16.5	17.5	24.0	21.5	22.5
17	5.0	3.0	4.0	12.5	9.5	10.5	19.0	16.0	17.5	22.0	20.5	21.0
18	6.0	3.5	4.5	11.0	8.0	9.5	19.5	15.0	17.0	23.0	18.5	20.5
19	7.0	5.0	6.5	10.5	6.5	8.0	21.5	15.5	18.5	23.5	18.5	20.5
20	8.5	7.0	7.5	12.0	7.0	9.0	23.0	17.0	19.5	24.0	19.0	21.5
21	8.0	5.5	7.0	10.5	9.0	9.5	23.5	17.5	20.0	25.0	21.0	22.5
22	9.5	7.0	8.0	9.0	7.0	7.5	23.5	17.5	20.0	23.5	21.0	22.5
23	11.0	8.0	9.5	9.5	7.0	8.0	23.0	17.5	20.0	22.0	20.0	21.0
24	14.0	10.5	12.0	10.5	9.0	9.5	22.0	17.5	20.0	20.5	18.5	19.5
25	14.5	13.5	14.0	11.0	9.0	10.0	23.5	18.5	20.5	20.5	17.5	19.0
26	14.0	11.5	12.0	11.0	8.0	9.5	22.5	17.5	19.5	22.0	17.5	19.5
27	12.5	11.0	11.5	13.0	8.5	11.0	20.5	18.0	19.5	23.5	18.0	20.5
28	11.0	9.0	9.5	16.5	11.0	13.5	22.5	18.5	20.0	23.5	18.5	21.0
29	---	---	---	19.0	14.5	16.5	22.5	18.5	20.0	22.5	19.5	21.0
30	---	---	---	21.0	17.0	18.5	22.0	16.5	19.0	22.0	19.0	20.0
31	---	---	---	18.0	16.5	17.0	---	---	---	22.5	19.0	20.5
MONTH	14.5	.5	6.0	21.0	6.5	10.5	23.5	8.0	17.0	26.5	14.0	20.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	20.5	22.5	22.0	20.5	21.0	26.5	24.5	25.5	23.5	22.0	22.5
2	24.5	21.0	23.0	22.5	20.0	21.0	26.0	23.5	24.5	24.0	22.0	23.0
3	25.0	21.5	23.0	24.0	20.0	22.0	25.0	21.5	23.0	25.0	22.5	23.5
4	26.0	22.0	23.5	25.5	21.5	23.5	25.0	20.5	23.0	26.5	23.5	24.5
5	27.5	23.0	25.0	25.0	22.5	24.0	25.0	21.0	23.0	27.0	24.0	25.5
6	25.5	23.5	24.5	24.5	23.0	24.0	24.5	22.0	23.5	27.5	24.0	25.5
7	24.0	23.0	23.5	26.0	23.0	24.5	26.0	23.0	24.5	27.5	24.5	26.0
8	25.5	22.0	23.5	27.0	22.5	24.5	25.5	24.5	25.0	28.0	25.0	26.0
9	26.5	22.5	24.5	27.0	23.5	25.5	26.0	24.0	25.0	27.5	25.0	26.0
10	28.5	23.5	25.5	28.5	24.0	26.0	27.0	24.5	25.5	28.5	25.0	26.5
11	27.0	24.5	26.0	28.0	24.0	25.5	27.5	23.5	25.5	27.0	25.0	26.0
12	26.0	24.0	25.0	26.5	24.0	25.0	28.0	24.5	26.0	25.0	22.5	23.5
13	24.0	21.5	22.5	27.5	23.5	25.0	29.0	25.0	27.0	22.5	20.0	21.5
14	23.0	19.0	21.0	27.0	24.0	25.5	29.5	26.0	27.5	21.0	17.5	19.0
15	24.0	19.0	21.5	29.0	24.0	26.0	29.0	25.0	27.0	20.5	16.5	18.5
16	24.0	22.0	23.0	28.5	25.0	26.5	28.5	25.5	27.0	20.0	16.0	18.0
17	26.0	21.5	23.5	26.0	24.5	25.5	26.5	25.0	25.5	20.5	16.0	18.5
18	26.0	23.0	24.5	27.0	23.5	25.0	25.5	23.5	24.0	20.5	16.5	18.5
19	26.0	23.5	25.0	27.0	23.0	25.0	28.5	22.5	24.5	21.0	17.0	19.0
20	25.5	22.5	24.0	28.0	24.5	26.5	25.0	23.5	24.0	21.0	18.0	19.5
21	24.5	21.0	23.0	29.5	25.5	27.5	23.5	22.0	23.0	21.5	18.0	19.5
22	25.0	21.0	23.0	28.0	26.0	27.0	24.5	23.0	23.5	20.0	19.5	19.5
23	26.0	22.5	24.0	26.0	24.0	25.0	24.0	21.5	22.5	20.5	18.5	19.5
24	27.0	23.0	25.0	24.5	23.0	24.0	22.5	21.0	21.5	21.5	18.0	20.0
25	27.5	24.0	25.5	24.5	23.0	24.0	23.5	21.5	22.5	20.5	18.5	19.0
26	27.0	24.0	25.5	25.5	23.5	24.5	24.0	23.0	23.5	19.0	17.5	18.5
27	25.0	22.0	23.5	24.5	23.0	24.0	25.0	23.0	24.0	20.5	18.0	19.0
28	24.5	21.0	23.0	23.0	22.0	22.5	24.5	22.0	23.5	18.5	16.0	17.5
29	24.0	21.5	23.0	23.5	22.0	22.5	25.5	23.0	24.0	18.0	14.5	16.5
30	22.5	22.0	22.5	25.5	22.5	23.5	26.5	23.5	24.5	18.0	14.5	16.5
31	---	---	---	27.0	23.5	25.0	23.5	22.5	23.0	---	---	---
MONTH	28.5	19.0	24.0	29.5	20.0	24.5	29.5	20.5	24.5	28.5	14.5	21.0
YEAR	29.5	.0	15.5									

02085220 LITTLE RIVER NEAR ORANGE FACTORY, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/30	0745	WATER	0	.99	27	38		2.0		13.8	10K
85/02/18	0830	WATER	0	1.22	67	37	7.00	4.0	23.0	13.0	40
85/03/18	0830	WATER	0	1.05	38	55	7.10	8.0		9.2	20
85/04/24	1130	WATER	0	.80	15	81	7.40	22.0		7.0	10K
85/05/20	1215	WATER	0	.78	12	78	7.20	20.0	7.0	9.8	30
85/06/25	1200	WATER	0	.63	5	90	7.30	25.0		8.9	30
85/07/18	1150	WATER	0	.48	2	105	7.20	24.0		8.5	30
85/08/30	1300	WATER	0.1	.95	15	70	7.20	24.0	25.0	9.2	60
85/09/19	1145	WATER	0.1	.68	3	71	7.40	18.0		11.8	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/30	0745	WATER	0		3	79					
85/02/18	0830	WATER	0	79	7	76	.57	.070	.300	.030	.010K
85/03/18	0830	WATER	0	39	2	64					
85/04/24	1130	WATER	0	114	1K	100					
85/05/20	1215	WATER	0	31	6	89	.51	.020	.400	.040	.010
85/06/25	1200	WATER	0	38	5	64					
85/07/18	1150	WATER	0	46	1	99					
85/08/30	1300	WATER	0.1	26	9	71	.34	.040	.500	.060	.010
85/09/19	1145	WATER	0.1	34	1K	98					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/18	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/20	1215	WATER	0	10K	20K	80	20K	100K	.2K	100K	20K
85/08/30	1300	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

NEUSE RIVER BASIN

02085500 FLAT RIVER AT BAHAMA, NC

LOCATION.--Lat 36°10'57", long 78°52'44", Durham County, Hydrologic Unit 03020201, on right bank 0.5 mi upstream from Lake Michie, 1.2 mi upstream from bridge on Secondary Road 1616, 1.2 mi north of Bahama, and 1.5 mi upstream from Dial Creek.

DRAINAGE AREA.--149 mi^2.

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 1333: 1926, 1928(M), 1938, 1946. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 346.85 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1925, nonrecording gage at same site at datum 0.58 ft lower.

REMARKS.--No estimated daily discharges. Records good. Prior to December 1962, some diurnal fluctuation and infrequent regulation at low flow caused by small mill 5 mi upstream. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--60 years, 144 ft^3/s, 13.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 20,000 ft^3/s July 26, 1938 (gage height, not determined), computed on basis of records for nearby stations; minimum, 0.23 ft^3/s Sept. 26, 28, 29, Oct. 1, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	0930	*3,300	*6.00				

Minimum discharge, 2.8 ft^3/s July 24, gage height, 0.87 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	14	30	25	1710	145	51	21	15	32	25	121
2	61	13	22	26	2350	123	47	20	14	23	44	59
3	29	12	227	1080	687	105	45	55	13	28	40	42
4	19	12	112	2330	324	91	44	58	12	17	21	33
5	15	11	89	946	237	87	43	36	12	54	13	27
6	12	11	785	308	358	79	42	28	11	41	9.9	21
7	9.1	10	177	191	363	72	40	24	9.6	22	8.4	18
8	8.2	11	86	143	213	69	38	21	9.2	15	7.6	15
9	8.6	11	64	103	159	69	37	20	10	12	6.7	13
10	7.6	10	53	83	131	66	37	19	11	9.7	6.3	12
11	7.2	12	45	75	115	64	36	19	11	8.3	6.3	11
12	7.1	14	41	70	1030	64	37	19	11	7.3	8.6	10
13	6.9	16	37	65	487	62	37	19	11	6.7	6.9	9.5
14	6.6	16	35	62	254	58	37	18	9.5	6.3	6.1	8.5
15	6.6	12	33	58	187	57	38	17	9.6	5.6	5.2	7.8
16	7.2	11	32	53	152	54	44	24	11	5.0	4.3	7.3
17	6.9	10	30	52	126	54	54	44	11	4.6	4.0	7.1
18	6.9	10	30	59	109	54	40	37	9.4	4.5	1030	7.0
19	6.9	12	30	59	97	49	36	26	9.1	5.0	420	6.8
20	6.6	23	29	55	91	48	33	20	9.0	7.1	103	6.6
21	6.4	29	29	45	83	48	31	17	8.3	5.7	539	6.6
22	7.0	21	29	45	77	53	29	16	7.0	4.6	149	6.4
23	22	17	29	43	75	73	27	118	6.2	3.9	65	6.3
24	16	15	28	45	75	83	26	75	6.3	3.0	43	6.2
25	11	14	27	47	74	129	26	57	63	5.2	44	21
26	11	14	25	45	523	96	24	43	34	15	98	18
27	9.4	15	24	42	354	73	24	32	18	30	51	10
28	9.3	15	24	44	195	66	23	24	12	196	104	7.7
29	9.9	59	24	48	---	63	24	19	9.0	80	61	6.9
30	10	48	25	51	---	58	22	17	11	47	48	5.8
31	12	---	25	144	---	54	---	16	---	34	716	---
TOTAL	500.4	498	2276	6442	10636	2266	1072	979	393.2	738.5	3694.3	537.5
MEAN	16.1	16.6	73.4	208	380	73.1	35.7	31.6	13.1	23.8	119	17.9
MAX	138	59	785	2330	2350	145	54	118	63	196	1030	121
MIN	6.4	10	22	25	74	48	22	16	6.2	3.0	4.0	5.8
CFSM	.11	.11	.49	1.40	2.55	.49	.24	.21	.09	.16	.80	.12
IN.	.12	.12	.57	1.61	2.66	.57	.27	.24	.10	.18	.92	.13

CAL YR 1984	TOTAL	74512.1	MEAN	204	MAX	4170	MIN	4.3	CFSM	1.37	IN.	18.60
WTR YR 1985	TOTAL	30032.9	MEAN	82.3	MAX	2350	MIN	3.0	CFSM	.55	IN.	7.50

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC

LOCATION.--Lat 36°08'55", long 78°49'43", Durham County, Hydrologic Unit 03020201, on right bank 900 ft downstream from Durham municipal dam, 3 mi southeast of Bahama, and 5 mi upstream from confluence with Eno River.

DRAINAGE AREA.--168 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1927 to September 1959, August 1961 to September 1966, October 1982 to current year.

REVISED RECORDS.--WDR NC-83-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 256.60 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 19, 1927, datum of gage was 1.30 ft higher. Satellite data transmitter at station.

REMARKS.--Records good. Flow regulated by Lake Michie (Station 02086490). An average of 30.4 ft^3/s was diverted above station for Durham municipal water supply. About 12.4 ft^3/s of sewage effluent was returned to tributaries downstream and about 13.4 ft^3/s was diverted to Cape Fear River basin.

AVERAGE DISCHARGE.--40 years (water years 1928-59, 1962-66, 1983-85), 152 ft^3/s, 12.29 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft^3/s July 26, 1938, gage height, 19.50 ft; no flow September 3-14, 1938 (result of construction work upstream) and Sept. 26-30, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,750 ft^3/s Feb. 2, gage height, 9.81 ft; minimum, 0.11 ft^3/s Aug. 15-17, minimum gage height, 0.49 ft Nov. 26-28, 30, Dec. 1, 2, 6-8; minimum daily, 0.14 ft^3/s Aug. 10, 11, 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	.27	.15	52	1480	175	38	.35	31	.42	e.24	e17
2	.34	.29	.20	53	2870	134	33	.35	31	.35	e.29	e12
3	.29	.26	.39	54	1100	105	29	12	17	.35	e.19	e8.6
4	.29	.28	.19	1840	446	96	29	29	.44	.35	e.19	42
5	.29	.29	.31	1480	289	90	28	29	.43	.35	e.19	51
6	.34	.29	.22	443	428	80	27	29	.43	.36	e.19	51
7	.32	.29	.18	251	488	66	26	10	.48	.38	e.19	51
8	.29	.38	24	176	300	61	26	.29	.50	.34	e.24	35
9	.29	.43	57	119	192	59	18	.29	.50	.33	e.19	22
10	.29	.39	21	82	146	54	29	.31	.50	.33	e.14	22
11	.33	.40	.27	66	122	51	18	.35	.48	.33	e.14	22
12	.29	1.5	19	56	1000	51	24	.39	.55	.24	e.19	22
13	.24	.33	35	52	790	46	31	.43	.41	.17	.18	36
14	.24	.42	.23	54	355	44	29	.43	.39	.18	.17	51
15	.24	.43	.19	60	238	41	20	.43	1.8	.19	.14	50
16	.24	.43	.19	61	176	39	.52	.56	.50	.28	.14	50
17	.24	.39	20	61	141	36	4.1	.48	.40	.35	.16	49
18	.28	.29	51	46	115	35	.41	.46	.87	.34	.61	49
19	.29	.37	52	61	100	32	.38	.43	.36	.34	141	49
20	.28	.32	51	61	87	31	.34	.51	.35	.29	132	31
21	.28	.25	51	42	81	31	.34	.61	.35	.29	469	8.6
22	.29	.24	44	51	74	33	.36	.76	.41	.31	224	.19
23	.25	.24	50	61	69	42	.36	.62	.43	.31	67	.19
24	.24	1.5	49	61	67	66	.35	20	.45	.29	29	.21
25	.24	.24	49	61	67	133	.34	30	.45	.44	25	.23
26	.23	.18	48	61	470	130	.34	30	.40	.33	43	.25
27	.19	.15	48	61	548	86	.42	30	.41	.47	53	.26
28	.20	.24	49	61	261	65	.44	20	.43	.34	52	.21
29	.22	.20	49	61	---	55	.44	18	.42	.27	52	.24
30	.27	.18	49	61	---	48	.39	31	.39	e.24	e40	.24
31	.24	---	51	62	---	43	---	31	---	e.24	e25	---
TOTAL	8.70	11.47	869.52	5771	12500	2058	414.53	327.05	92.53	9.80	1355.78	731.22
MEAN	.28	.38	28.0	186	446	66.4	13.8	10.5	3.08	.32	43.7	24.4
MAX	.64	1.5	57	1840	2870	175	38	31	31	.47	469	51
MIN	.19	.15	.15	42	67	31	.34	.29	.35	.17	.14	.19

CAL YR 1984 TOTAL 79127.31 MEAN 216 MAX 5510 MIN .15
WTR YR 1985 TOTAL 24149.60 MEAN 66.2 MAX 2870 MIN .14

e Estimated

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to September 1985.
WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the Falls Lake. Interruptions in the daily record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 112 microsiemens Sept. 22, 1985; minimum, 39 microsiemens Apr. 23, 1983.
WATER TEMPERATURE: Maximum recorded, 32.5°C Aug. 23, 1983; minimum recorded, 1.0°C Dec. 7, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 112 microsiemens Sept. 22; minimum, 53 microsiemens Feb. 7, 8, 9.
WATER TEMPERATURE: Maximum, 31.0°C Sept. 3; minimum recorded, 1.0°C Dec. 7.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
23...	1120	.24	82	6.5	19.0	30	762	1.8	19	K12	K52
DEC											
04...	1150	.19	78	6.4	7.5	5	764	7.1	59	--	--
19...	1315	52	75	5.9	7.0	60	752	9.0	75	48	48
JAN											
03...	1255	54	76	6.6	10.0	20	758	11.2	100	--	--
FEB											
20...	1210	86	60	6.1	5.5	100	764	11.5	91	K7	K14
MAR											
26...	1340	125	65	6.0	10.0	50	763	11.0	97	--	--
APR											
30...	1115	.43	78	7.1	14.0	30	761	6.3	61	K2	K6
MAY											
23...	1310	.50	75	5.7	19.0	30	750	8.4	92	--	--
JUN											
18...	1305	.35	78	6.0	22.0	20	748	6.6	77	--	--
JUL											
22...	1100	.35	85	6.3	22.0	25	762	3.7	42	--	--
AUG											
19...	1515	250	77	6.0	27.0	20	753	6.8	86	--	--
SEP											
24...	1030	.24	80	5.4	19.5	25	748	3.9	43	--	1600

K Results based on colony count outside the acceptable range (non-ideal colony count).

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
23...	26	0	6.6	2.3	4.0	23	.4	2.0	4.4	4.1	.10
DEC											
04...	26	0	6.6	2.4	4.4	25	.4	1.7	4.5	4.4	<.10
19...	22	0	5.1	2.2	4.3	28	.4	2.2	5.6	5.2	<.10
JAN											
03...	22	0	5.3	2.2	4.4	28	.4	1.9	8.5	5.6	.10
FEB											
20...	16	6	3.7	1.6	3.6	30	.4	1.9	9.5	5.9	<.10
MAR											
26...	18	3	4.2	1.9	4.8	34	.5	1.3	7.1	5.4	<.10
APR											
30...	22	3	5.3	2.2	4.5	29	.4	1.4	7.2	5.3	<.10
MAY											
23...	24	4	6.1	2.2	4.6	28	.4	1.3	7.0	4.5	<.10
JUN											
18...	24	1	6.0	2.3	4.8	29	.4	1.3	6.4	5.4	<.10
JUL											
22...	26	0	6.5	2.3	5.3	29	.5	1.6	6.5	6.2	.10
AUG											
19...	23	0	5.5	2.2	5.3	31	.5	1.9	4.3	5.1	<.10
SEP											
24...	25	9	6.1	2.3	4.5	26	.4	2.3	5.6	5.0	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT										
23...	9.3	64	53	.09	.04	--	.010	<.10	--	.270
DEC										
04...	9.3	62	52	.08	.03	--	<.010	.20	--	.180
19...	10	52	48	.07	7.3	--	.030	--	--	.120
JAN										
03...	10	63	54	.09	9.2	.07	.030	.10	--	.090
FEB										
20...	8.7	65	41	.09	15	.48	.020	.50	--	.040
MAR										
26...	10	50	44	.07	17	--	<.010	.20	--	<.010
APR										
30...	7.4	46	45	.06	.05	.19	.010	.20	--	.050
MAY										
23...	8.0	51	46	.07	.07	--	<.010	.20	.20	.080
JUN										
18...	8.7	62	49	.08	.06	--	<.010	.10	--	.060
JUL										
22...	8.4	68	55	.09	.06	--	<.010	<.10	--	.060
AUG										
19...	8.1	56	47	.08	38	--	<.010	<.10	<.10	.070
SEP										
24...	8.2	51	44	.07	.03	--	<.010	.10	--	.100

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT										
23...	--	--	.63	--	.90	--	--	--	--	.040
DEC										
04...	--	--	.12	--	.30	--	--	.50	2.2	.100
19...	.090	.12	.78	.11	.90	.70	.20	--	--	.090
JAN										
03...	--	--	.61	--	.70	--	--	.80	3.5	<.010
FEB										
20...	--	--	.76	--	.80	--	--	1.3	5.8	.020
MAR										
26...	--	--	--	--	.70	--	--	.90	4.0	.040
APR										
30...	--	--	.25	--	.30	--	--	.50	2.2	.040
MAY										
23...	.010	.01	.12	--	.20	--	--	.40	1.8	<.010
JUN										
18...	--	--	.44	--	.50	--	--	.60	2.7	.060
JUL										
22...	--	--	.34	--	.40	--	--	--	--	.030
AUG										
19...	.040	.05	2.7	1.6	2.8	1.2	1.6	--	--	.040
SEP										
24...	--	--	.60	--	.70	--	--	.80	3.5	.190

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT										
23...	--	.020	--	--	<1	<1	<10	170	1900	4
DEC										
04...	--	.030	--	--	<1	<1	<10	3	1100	4
19...	<.010	.030	<.010	--	<1	<1	10	2	1200	2
JAN										
03...	--	.010	--	--	<1	<1	<10	2	820	1
FEB										
20...	--	.030	--	--	<1	<1	10	3	1600	2
MAR										
26...	--	.020	--	--	<1	1	<10	3	850	<1
APR										
30...	--	.030	--	--	<1	1	<10	4	780	1
MAY										
23...	--	.010	.020	.06	<1	<1	10	5	1000	7
JUN										
18...	--	.020	--	--	<1	<1	10	5	580	<1
JUL										
22...	--	.030	--	--	1	<1	<10	6	1000	3
AUG										
19...	.050	.040	.040	.12	1	<1	<10	8	1100	2
SEP										
24...	--	.020	--	--	1	1	10	4	1400	14

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT								
23...	1500	.1	<1	10	5.1	--	10	.00
DEC								
04...	390	<.1	<1	<10	5.1	--	--	--
19...	270	.3	<1	10	6.4	.03	13	1.8
JAN								
03...	60	<.1	<1	20	5.9	--	6	.87
FEB								
20...	70	<.1	<1	20	7.3	--	--	--
MAR								
26...	40	<.1	<1	<10	5.4	--	7	2.4
APR								
30...	60	.1	<1	20	5.3	--	7	.00
MAY								
23...	270	.2	<1	<10	4.2	.03	15	.02
JUN								
18...	230	<.1	<1	10	6.4	--	9	.00
JUL								
22...	430	<.1	<1	10	--	--	8	.00
AUG								
19...	280	<.1	<1	60	7.0	.04	30	20
SEP								
24...	410	<.1	<1	20	7.7	--	10	.00

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	76	72	73	83	77	80	80	77	78	78	77	77
2	75	72	73	81	76	78	79	72	77	78	76	77
3	75	71	73	78	73	76	78	72	76	76	76	76
4	75	72	73	76	72	74	79	76	77	80	74	77
5	76	72	74	77	74	76	79	75	78	75	72	73
6	77	73	75	77	73	75	82	79	81	71	67	69
7	77	73	75	76	72	75	81	80	81	67	65	67
8	77	74	76	76	73	74	83	79	80	67	65	66
9	77	73	76	76	72	74	80	79	80	65	65	65
10	77	72	76	76	73	75	81	80	80	65	64	64
11	77	72	75	76	73	75	82	81	82	65	64	64
12	76	72	74	79	74	76	84	76	80	64	64	64
13	76	72	73	75	71	73	80	77	78	64	63	64
14	76	73	74	75	72	73	83	78	80	63	63	63
15	75	72	74	76	72	74	83	79	81	63	63	63
16	76	74	75	76	73	74	83	81	82	63	62	62
17	77	73	75	77	73	75	83	77	80	62	58	61
18	79	74	76	77	74	75	77	76	77	60	58	58
19	78	74	76	78	75	76	77	76	76	58	58	58
20	79	74	76	80	75	77	77	76	76	58	58	58
21	78	74	76	77	75	76	77	76	76	58	58	58
22	79	74	77	77	75	76	77	76	76	58	58	58
23	81	75	78	77	75	76	76	76	76	59	58	58
24	82	75	78	78	76	77	77	76	77	59	58	58
25	80	75	77	79	76	77	77	76	77	59	58	59
26	80	75	78	80	77	78	77	76	77	59	59	59
27	80	74	77	81	77	79	77	77	77	59	59	59
28	80	75	77	80	75	78	77	77	77	60	59	60
29	81	75	78	83	80	81	77	76	77	60	60	60
30	82	77	79	81	78	80	77	76	77	60	60	60
31	84	79	82	---	---	---	77	76	77	60	59	60
MONTH	84	71	76	83	71	76	84	72	78	80	58	64

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	60	59	60	65	65	65	68	67	68	76	69	73
2	62	60	61	67	66	66	69	68	68	75	70	73
3	62	58	59	66	66	66	69	68	69	75	70	72
4	58	55	56	66	64	66	70	69	69	72	71	71
5	55	55	55	68	64	66	71	70	70	71	70	71
6	55	54	55	67	67	67	71	70	71	71	71	71
7	54	53	53	67	66	67	74	71	71	74	70	72
8	53	53	53	67	66	66	71	71	71	76	71	74
9	54	53	54	66	66	66	76	72	73	77	71	74
10	54	54	54	66	66	66	73	72	72	77	71	74
11	55	54	55	66	66	66	74	72	73	77	71	74
12	55	54	55	67	65	66	76	73	74	76	71	74
13	55	54	55	66	66	66	75	74	74	76	70	73
14	56	55	56	66	66	66	77	74	75	76	71	74
15	57	56	56	66	65	66	85	74	77	76	70	74
16	57	57	57	66	65	66	88	80	83	75	71	73
17	57	57	57	66	65	65	88	74	79	77	71	75
18	57	57	57	65	64	65	80	73	77	77	70	74
19	57	57	57	65	64	65	86	71	76	76	71	73
20	61	57	59	65	64	65	76	71	74	76	71	74
21	61	60	60	65	65	65	76	70	74	77	70	74
22	61	60	61	65	64	65	76	70	73	77	68	75
23	61	61	61	66	65	65	75	70	73	76	69	72
24	62	61	61	66	65	65	76	69	73	75	73	74
25	62	61	61	65	65	65	77	70	74	75	74	74
26	62	61	61	65	65	65	77	71	74	76	74	75
27	67	63	65	66	65	65	76	70	73	76	75	76
28	65	65	65	67	65	66	76	70	73	79	76	77
29	---	---	---	67	66	67	76	69	73	81	76	78
30	---	---	---	67	67	67	76	70	73	77	77	77
31	---	---	---	68	67	67	---	---	---	78	77	77
MONTH	67	53	58	68	64	66	88	67	73	81	68	74

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	78	78	78	83	80	82	84	75	80	72	68	70
2	79	78	78	83	77	80	82	77	79	68	66	67
3	81	78	79	82	76	79	82	78	79	72	64	68
4	84	79	81	82	76	79	81	78	79	72	64	67
5	83	77	80	83	77	80	82	77	79	65	64	64
6	82	77	80	82	78	80	83	77	79	66	64	65
7	82	76	79	82	78	80	84	77	80	67	65	66
8	81	75	79	82	77	80	84	78	81	67	66	67
9	81	76	78	81	78	79	84	77	81	67	66	67
10	81	76	78	82	78	81	85	77	81	67	66	67
11	81	76	78	83	80	81	85	78	80	66	66	66
12	80	76	78	85	80	83	85	77	80	67	66	66
13	80	74	77	85	81	83	83	77	79	67	65	66
14	80	75	78	84	81	83	85	76	80	68	64	67
15	80	74	77	86	81	83	85	76	80	69	66	68
16	79	73	77	86	81	83	90	75	81	69	66	68
17	79	76	78	86	81	84	83	76	80	69	67	68
18	80	75	78	86	81	84	77	67	74	70	68	69
19	80	76	78	85	80	82	79	75	77	69	67	68
20	80	75	78	85	81	83	75	73	74	74	66	68
21	80	75	77	86	82	83	77	71	75	107	67	82
22	80	74	77	87	82	85	74	70	72	112	74	91
23	80	75	78	84	80	83	70	63	66	79	76	78
24	80	75	78	80	77	79	64	62	62	81	79	80
25	82	75	78	80	75	77	63	62	62	82	80	81
26	82	75	79	85	82	83	65	62	63	84	80	82
27	82	75	79	87	77	84	66	61	63	83	79	81
28	82	74	79	86	81	84	63	61	62	83	80	82
29	83	75	80	88	79	84	63	62	62	83	81	82
30	85	78	81	83	79	81	65	62	63	84	81	83
31	---	---	---	84	79	81	70	63	68	---	---	---
MONTH	85	73	78	88	75	82	90	61	74	112	64	72
YEAR	112	53	73									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	15.5	16.0	18.5	17.0	17.5	9.0	6.0	7.0	9.5	7.0	8.5
2	17.5	13.5	15.5	20.0	17.0	18.0	8.0	5.0	7.0	10.5	8.0	9.5
3	18.0	13.0	15.0	16.5	13.0	14.5	9.5	7.5	8.5	10.5	9.5	10.0
4	19.5	13.5	16.0	15.0	12.5	13.5	8.5	6.0	7.5	9.5	7.5	8.5
5	19.0	15.0	17.0	17.5	14.0	15.0	7.5	6.5	7.0	8.5	7.5	8.5
6	18.5	16.0	17.5	15.0	12.0	13.5	7.0	4.5	6.5	8.0	7.0	7.5
7	18.5	15.0	17.0	13.5	10.5	11.5	5.0	1.0	3.5	7.5	7.0	7.0
8	19.5	16.0	17.5	13.5	9.0	11.0	7.5	3.5	5.5	7.5	7.0	7.0
9	20.0	16.0	17.5	13.5	9.5	11.5	7.5	7.5	7.5	7.5	7.0	7.0
10	20.0	16.5	18.0	13.5	10.0	11.5	8.5	7.5	8.0	7.0	6.5	7.0
11	20.0	16.5	18.0	15.0	12.0	13.0	10.5	7.5	8.5	7.0	6.5	7.0
12	19.5	16.0	17.5	13.5	10.0	11.5	8.5	6.5	7.5	6.5	6.5	6.5
13	20.0	15.0	17.0	12.0	8.5	10.0	8.0	7.0	7.5	6.5	6.5	6.5
14	19.5	15.0	17.0	12.5	8.0	10.0	10.5	7.0	8.5	6.5	6.5	6.5
15	19.0	15.0	17.0	11.5	8.5	9.5	10.5	7.5	9.0	6.5	6.0	6.5
16	20.5	16.5	18.0	13.5	10.0	11.5	9.0	8.0	8.5	6.0	6.0	6.0
17	19.0	17.5	18.0	12.0	8.0	9.5	9.0	7.0	8.0	6.0	5.5	5.5
18	20.5	18.0	19.0	10.0	7.5	8.5	7.5	7.0	7.5	---	---	---
19	20.5	18.0	19.0	9.5	8.5	9.5	8.5	6.5	7.5	---	---	---
20	21.5	18.0	19.5	10.0	7.0	8.5	8.5	7.5	7.5	---	---	---
21	20.0	18.5	19.0	8.0	5.0	6.5	7.5	7.0	7.0	---	---	---
22	20.5	18.0	19.0	8.0	5.0	6.5	9.0	6.5	7.5	---	---	---
23	20.0	18.5	19.0	8.5	4.5	6.5	9.0	7.5	8.5	---	---	---
24	22.0	18.5	19.5	8.5	5.0	7.0	8.0	7.0	7.5	---	---	---
25	19.5	18.5	19.0	10.0	6.0	8.0	9.0	7.5	8.5	---	---	---
26	20.0	18.0	18.5	10.0	6.5	8.0	8.5	8.0	8.0	---	---	---
27	20.5	17.0	18.5	10.0	6.5	8.5	8.5	7.5	8.0	---	---	---
28	20.5	18.5	19.5	11.5	9.0	10.0	8.5	7.5	8.0	---	---	---
29	21.0	19.0	19.5	9.5	7.0	8.0	9.0	7.5	8.0	---	---	---
30	19.5	18.5	19.0	8.5	5.5	7.0	10.5	8.5	9.0	---	---	---
31	19.0	18.0	18.5	---	---	---	10.5	8.5	9.0	---	---	---
MONTH	22.0	13.0	18.0	20.0	4.5	10.5	10.5	1.0	7.5	10.5	5.5	7.5

02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	9.0	8.5	8.5	15.0	12.0	13.5	22.0	15.0	18.5
2	---	---	---	11.0	8.5	9.5	14.5	13.0	13.5	19.0	17.0	18.0
3	---	---	---	10.0	9.0	9.5	14.5	12.0	13.0	19.0	14.0	16.5
4	---	---	---	9.0	7.5	8.5	14.0	12.0	13.5	16.0	14.5	15.5
5	---	---	---	10.5	7.0	9.0	14.0	13.0	13.5	17.5	14.5	15.5
6	---	---	---	11.0	9.5	10.0	16.0	12.5	14.5	18.0	14.5	16.0
7	---	---	---	10.0	9.0	9.5	16.0	13.5	15.0	24.0	15.0	19.5
8	---	---	---	10.5	8.5	9.0	16.0	14.5	15.0	20.0	17.5	18.5
9	---	---	---	11.0	9.5	10.0	18.5	14.5	15.5	19.5	15.5	18.0
10	---	---	---	11.0	9.5	10.0	15.5	14.5	15.0	21.5	17.0	19.0
11	---	---	---	10.0	9.0	9.5	15.5	13.5	14.5	20.5	17.5	19.0
12	---	---	---	11.0	8.5	9.5	15.0	13.5	14.5	20.5	17.0	18.5
13	---	---	---	11.5	9.5	10.5	15.0	14.5	14.5	25.0	17.0	20.0
14	---	---	---	11.5	9.5	10.5	15.0	14.5	15.0	25.5	17.5	21.0
15	---	---	---	12.0	10.5	11.0	16.5	15.0	16.0	24.5	18.0	21.0
16	---	---	---	11.5	10.0	10.5	21.0	15.5	18.0	21.0	19.0	20.0
17	---	---	---	11.5	9.5	10.5	21.5	15.0	18.0	20.0	17.0	18.5
18	---	---	---	11.5	10.5	11.0	23.0	15.0	18.5	22.5	15.5	19.0
19	---	---	---	11.0	9.5	10.0	22.5	16.5	19.0	22.5	15.5	19.0
20	5.5	5.0	5.5	10.5	9.0	9.5	23.0	15.5	19.0	22.5	16.5	19.5
21	5.5	4.5	5.0	10.5	9.5	10.0	23.0	15.5	19.0	23.5	18.0	20.5
22	5.0	4.5	4.5	10.0	9.0	9.5	23.0	15.5	19.0	21.5	18.0	19.5
23	6.5	4.5	5.5	10.5	9.0	9.5	22.0	15.5	18.5	22.0	18.5	20.0
24	6.5	4.5	6.0	10.5	9.0	9.5	21.0	16.0	18.5	20.0	15.5	18.5
25	8.5	6.5	7.5	10.5	9.5	10.0	24.0	16.5	20.0	18.5	17.5	18.0
26	9.0	7.5	8.5	10.0	9.0	9.5	23.0	15.5	18.5	19.0	17.5	18.5
27	10.5	8.0	9.5	10.5	9.0	9.5	19.0	15.5	17.5	19.5	18.0	18.5
28	10.0	9.0	9.0	11.0	10.0	10.5	22.0	16.0	18.5	20.5	18.0	19.0
29	---	---	---	13.0	11.0	12.0	22.0	15.5	18.5	19.5	18.0	18.5
30	---	---	---	13.0	11.5	12.5	22.5	14.5	18.0	19.0	18.0	18.5
31	---	---	---	13.0	11.5	12.5	---	---	---	19.5	17.5	18.5
MONTH	10.5	4.5	7.0	13.0	7.0	10.0	24.0	12.0	16.5	25.5	14.0	18.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	17.5	18.5	19.5	18.0	18.5	26.5	21.5	24.0	28.0	23.5	25.5
2	19.5	18.0	18.5	22.0	17.5	19.0	25.5	21.0	23.5	24.5	23.5	24.0
3	24.5	18.0	20.5	23.5	18.0	20.5	25.0	19.0	22.0	31.0	22.5	26.5
4	25.0	19.0	22.0	25.0	18.0	21.5	25.0	18.5	21.5	27.5	19.5	23.5
5	26.0	19.5	22.0	24.0	19.0	21.5	26.5	18.5	22.0	22.5	22.0	22.0
6	23.5	19.5	21.5	22.5	19.0	20.5	23.0	20.0	21.0	22.5	22.0	22.0
7	21.5	18.5	20.0	25.5	19.0	22.0	25.0	19.5	22.0	22.5	22.0	22.0
8	23.5	17.5	20.5	25.0	18.5	22.0	22.5	20.0	21.0	23.0	22.0	22.5
9	24.0	18.5	21.0	25.5	20.0	22.5	24.5	19.5	21.5	22.5	22.0	22.5
10	27.0	19.0	22.5	26.5	20.5	23.0	26.0	20.0	22.5	23.0	22.0	22.5
11	23.5	19.5	21.5	28.5	21.0	24.0	27.0	20.0	23.0	23.0	22.0	22.5
12	23.0	20.0	21.5	26.5	20.5	23.5	26.5	20.5	23.0	22.5	22.0	22.0
13	23.0	18.0	20.5	26.0	20.0	23.0	25.0	20.0	22.5	23.5	21.5	22.5
14	23.5	16.5	20.0	25.5	20.5	23.0	25.5	20.0	23.5	23.5	22.0	22.5
15	23.5	16.0	19.5	27.0	20.5	23.5	24.5	19.5	22.0	23.0	22.0	22.5
16	22.0	18.0	20.0	27.5	21.5	24.5	25.5	19.5	22.0	22.5	22.0	22.0
17	26.0	19.0	22.5	25.0	21.5	23.5	22.5	19.5	20.5	22.5	21.5	22.0
18	24.0	20.5	22.0	26.5	20.0	23.0	23.5	20.0	21.0	22.5	21.5	22.0
19	25.5	21.0	23.0	25.5	19.5	22.5	27.5	19.5	24.5	22.0	21.5	21.5
20	25.5	20.0	23.0	25.5	21.0	23.0	26.5	24.5	25.5	22.5	21.5	22.0
21	25.0	19.0	21.5	26.5	21.5	24.0	27.5	24.0	26.0	25.5	22.0	23.5
22	25.5	19.0	22.0	25.5	22.0	24.0	26.0	24.5	25.5	23.5	21.0	22.0
23	25.5	20.0	22.5	22.5	20.0	21.0	24.0	22.5	23.5	23.5	19.5	21.0
24	26.0	20.0	23.0	21.5	18.5	20.0	22.5	22.0	22.0	24.0	19.5	21.5
25	27.0	20.5	23.5	21.0	19.0	20.0	22.5	21.5	22.0	22.0	18.5	19.5
26	26.0	20.0	23.0	24.5	20.5	22.0	23.0	21.5	22.5	19.5	17.5	18.5
27	24.5	18.5	21.5	22.5	20.5	21.5	23.0	22.0	22.5	23.5	18.0	20.0
28	24.0	18.5	21.0	22.0	21.0	21.0	22.5	22.0	22.5	21.0	16.5	18.5
29	23.5	19.0	21.0	22.5	19.5	21.0	23.0	22.0	22.5	20.5	16.0	18.0
30	21.0	19.5	20.0	27.0	20.5	23.0	23.0	22.0	22.5	19.5	16.0	17.5
31	---	---	---	27.0	21.0	24.0	26.5	22.0	25.0	---	---	---
MONTH	27.0	16.0	21.5	28.5	17.5	22.0	27.5	18.5	22.5	31.0	16.0	22.0
YEAR	31.0	1.0	16.0									

NEUSE RIVER BASIN

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC

LOCATION.--Lat 36°07'40", long 78°48'55", Granville County, Hydrologic Unit 03020201, on left bank 60 ft downstream of Butner sewage disposal outfall, 1.5 mi downstream from bridge on Secondary Road 1120, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--43.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 255 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for June 10-30, July 1-31, August 1-8, September 23-30 which are poor due to beaver dams below gage. Some diurnal fluctuation at low flow. The town of Butner diverted an average of 2.5 ft^3/s for municipal water supply upstream of station and returned an average of 2.1 ft^3/s as sewage effluent upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,210 ft^3/s Mar. 6, 1984, gage height, 7.59 ft; minimum, 0.96 ft^3/s Oct. 7, 1984; minimum gage height, 1.72 ft Oct. 18, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 3	2215	928	6.55	Feb. 2	1045	928	6.55
Feb. 1	1015	*1,420	*6.88				

Minimum discharge, 0.96 ft^3/s Oct. 7; minimum gage height, 1.95 ft, Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	3.8	4.8	3.5	930	35	12	3.1	2.2	2.0	2.4	5.2
2	3.3	3.1	4.7	5.7	758	30	11	2.9	2.1	1.9	3.4	4.0
3	2.3	2.8	61	466	252	25	9.0	41	2.5	1.8	2.1	3.3
4	2.3	2.8	10	669	81	22	9.9	23	2.8	1.6	2.2	3.0
5	2.0	3.4	37	287	70	21	8.3	12	2.7	1.6	2.2	2.9
6	1.6	3.8	144	71	219	20	7.2	8.0	2.8	1.5	2.4	2.3
7	1.2	3.7	47	39	165	15	7.2	5.9	2.4	1.5	2.4	2.6
8	1.6	4.1	21	29	67	14	7.4	4.8	2.2	1.5	2.2	2.2
9	1.9	4.0	14	21	41	14	7.2	3.8	2.0	1.6	2.1	2.2
10	2.1	3.6	11	17	33	13	6.3	3.2	3.9	1.7	1.6	2.3
11	2.3	4.9	9.7	14	30	14	5.7	2.4	3.0	2.9	1.9	2.4
12	2.2	4.6	8.0	13	396	15	5.7	2.2	3.6	1.6	2.8	2.5
13	1.9	4.7	7.4	10	172	13	5.9	2.8	4.7	1.5	3.8	2.7
14	1.5	5.2	8.4	11	66	12	5.6	3.2	3.3	1.5	4.5	8.3
15	2.1	5.3	5.3	11	44	11	7.3	2.9	2.6	1.8	5.3	9.7
16	2.5	5.4	4.8	8.9	33	9.8	7.7	4.2	2.5	1.8	6.2	10
17	2.6	4.9	5.3	11	28	10	11	3.6	4.0	2.0	6.1	10
18	3.3	4.7	5.3	12	25	12	8.4	3.2	3.1	2.0	44	10
19	3.1	5.9	5.1	12	23	9.1	6.6	2.6	2.9	2.0	14	9.3
20	2.3	7.5	5.0	12	22	9.4	5.6	2.8	2.9	2.0	4.4	3.2
21	2.5	5.1	4.7	8.5	20	10	5.0	2.8	2.9	2.2	9.1	2.5
22	4.3	2.2	5.3	8.0	18	13	5.1	3.5	2.7	2.4	6.2	2.6
23	4.9	2.7	6.0	8.3	18	18	4.5	59	2.5	2.5	4.1	3.7
24	3.9	2.9	5.1	8.5	17	26	4.0	28	2.5	2.5	2.2	4.6
25	4.0	3.2	4.8	8.3	18	64	4.1	13	2.4	4.4	5.7	5.0
26	3.8	4.2	4.8	8.4	258	39	3.8	8.0	2.4	3.0	5.1	5.2
27	3.0	5.0	4.2	6.4	125	26	3.1	5.3	2.2	2.3	4.2	5.4
28	2.7	8.7	3.6	8.3	52	21	2.8	3.9	1.9	4.4	5.0	4.8
29	3.1	9.8	3.6	12	---	18	4.4	3.2	1.8	1.9	3.7	4.6
30	5.0	5.8	3.8	12	---	15	3.9	3.5	1.8	2.0	3.4	4.9
31	7.0	---	4.7	83	---	13	---	2.7	---	2.2	5.2	---
TOTAL	113.3	137.8	469.4	1894.8	3981	587.3	195.7	270.5	81.3	65.6	169.9	141.4
MEAN	3.65	4.59	15.1	61.1	142	18.9	6.52	8.73	2.71	2.12	5.48	4.71
MAX	27	9.8	144	669	930	64	12	59	4.7	4.4	44	10
MIN	1.2	2.2	3.6	3.5	17	9.1	2.8	2.2	1.8	1.5	1.6	2.2
CFSM	.08	.11	.35	1.42	3.30	.44	.15	.20	.06	.05	.13	.11
IN.	.10	.12	.41	1.64	3.44	.51	.17	.23	.07	.06	.15	.12

CAL YR 1984 TOTAL 21157.4 MEAN 57.8 MAX 1660 MIN 1.2 CFSM 1.34 IN. 18.30
WTR YR 1985 TOTAL 8108.0 MEAN 22.2 MAX 930 MIN 1.2 CFSM .52 IN. 7.01

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to September 1985.
WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the Falls Lake.

COOPERATION.--Chemical and biological data shown in the last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, ≥1,100 microsiemens Aug. 25, 30, 31, 1984; minimum, 39 microsiemens Mar. 7, 1984.
WATER TEMPERATURE: Maximum, 31.5°C Aug. 15, 1985; minimum, 1.0°C Jan. 21, 29, Feb. 9, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 874 microsiemens Oct. 13; minimum, 55 microsiemens Feb. 1.
WATER TEMPERATURE: Maximum, 31.5°C Aug. 15; minimum, 1.0°C Jan. 21, 29, Feb. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
23...	1025	5.0	510	6.7	22.5	25	763	3.5	40	<4	<4
DEC											
04...	1040	10	240	6.3	8.5	140	764	8.6	73	--	--
19...	1355	5.7	470	6.5	15.0	30	751	6.3	63	<2	<2
JAN											
03...	1355	614	62	6.3	9.0	190	758	11.5	100	--	--
FEB											
20...	1015	22	125	6.7	6.0	80	765	11.7	94	<1	<1
MAR											
26...	1430	36	108	6.0	11.0	60	763	11.2	101	--	--
APR											
30...	1020	4.0	460	7.2	19.0	45	761	5.5	59	<2	<2
MAY											
23...	1430	83	61	5.8	24.0	45	749	8.1	98	--	--
JUN											
18...	1415	3.4	585	6.4	26.0	30	748	5.1	64	--	--
JUL											
22...	0950	2.4	575	7.1	26.5	45	762	4.3	54	--	--
AUG											
19...	1445	8.5	180	6.0	25.0	150	754	6.1	75	--	--
SEP											
24...	0915	4.5	780	6.0	24.5	35	748	5.0	61	--	<4

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT											
23...	59	10	16	4.6	78	72	5	5.8	55	58	3.1
DEC											
04...	48	9	11	5.0	23	49	1	3.0	29	21	.50
19...	56	0	15	4.6	69	71	4	4.1	42	57	1.5
JAN											
03...	20	4	4.4	2.1	3.2	24	.3	1.7	9.6	3.9	.10
FEB											
20...	28	2	6.7	2.8	11	44	.9	2.1	15	12	.20
MAR											
26...	25	9	6.0	2.5	9.2	42	.8	1.7	15	10	.30
APR											
30...	64	0	16	5.8	60	65	3	5.0	48	64	1.7
MAY											
23...	20	0	4.8	1.9	3.8	28	.4	1.1	7.5	3.6	<.10
JUN											
18...	59	0	18	3.3	81	73	5	5.6	59	83	2.6
JUL											
22...	52	0	17	2.3	88	76	6	7.4	52	89	2.5
AUG											
19...	38	18	10	3.2	19	49	1	4.1	20	17	9.6
SEP											
24...	62	21	19	3.5	120	78	7	8.3	77	110	8.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)
OCT											
23...	13	300	260	.41	4.1	6.0	.020	6.0	--	.620	--
DEC											
04...	14	173	130	.24	4.7	2.4	.020	2.4	--	1.40	--
19...	14	252	260	.34	3.9	.59	.010	.60	.55	3.60	3.20
JAN											
03...	8.0	46	43	.06	76	.18	.020	.20	--	.110	--
FEB											
20...	9.7	97	75	.13	5.8	.29	.010	.30	--	.420	--
MAR											
26...	9.2	82	63	.11	8.0	.79	.010	.80	--	<.010	--
APR											
30...	11	280	250	.38	3.0	--	<.010	3.1	--	.350	--
MAY											
23...	6.8	43	51	.06	9.6	--	<.010	<.10	<.10	.050	.030
JUN											
18...	13	368	300	.50	3.4	--	<.010	4.2	--	1.30	--
JUL											
22...	11	340	300	.46	2.2	4.2	.030	4.2	--	.910	--
AUG											
19...	10	138	110	.19	3.2	2.5	.030	2.5	2.5	.180	.160
SEP											
24...	13	450	380	.61	5.5	--	<.010	4.7	--	.960	--

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT										
23...	--	4.8	--	5.4	--	--	11	50	--	4.00
DEC										
04...	--	1.8	--	3.2	--	--	5.6	25	--	1.70
19...	4.1	3.0	1.8	6.6	1.6	5.0	7.2	32	5.6	2.90
JAN										
03...	--	.89	--	1.0	--	--	1.2	5.3	--	.200
FEB										
20...	--	.98	--	1.4	--	--	1.7	7.5	--	.360
MAR										
26...	--	--	--	.80	--	--	1.6	7.1	--	.290
APR										
30...	--	3.9	--	4.2	--	--	7.3	32	--	4.20
MAY										
23...	.04	.05	--	.10	--	--	--	--	--	.030
JUN										
18...	--	2.9	--	4.2	--	--	8.4	37	--	3.40
JUL										
22...	--	5.0	--	5.9	--	--	10	45	--	4.10
AUG										
19...	.21	1.6	1.4	1.8	.20	1.6	4.3	19	4.1	1.60
SEP										
24...	--	3.8	--	4.8	--	--	9.5	42	--	8.60

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT										
23...	--	3.30	--	--	1	1	20	310	2500	3
DEC										
04...	--	1.60	--	--	<1	<1	10	57	1700	6
19...	2.50	2.30	--	--	<1	<1	30	79	1000	4
JAN										
03...	--	.040	--	--	1	<1	20	9	7200	7
FEB										
20...	--	.330	--	--	<1	<1	30	14	700	2
MAR										
26...	--	.230	--	--	1	8	<10	10	810	1
APR										
30...	--	3.80	--	--	1	1	10	88	720	10
MAY										
23...	.040	.020	.060	.18	<1	<1	10	2	1200	9
JUN										
18...	--	3.50	--	--	1	<1	<10	49	520	<1
JUL										
22...	--	3.90	--	--	2	2	10	100	2300	13
AUG										
19...	1.50	1.50	1.50	4.6	1	<1	10	30	2200	2
SEP										
24...	--	8.00	--	--	1	1	10	80	630	17

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT								
23...	1200	.1	<1	70	7.2	--	19	.26
DEC								
04...	130	.1	<1	30	16	--	20	.54
19...	310	.3	--	70	15	.12	12	.18
JAN								
03...	600	<.1	<1	110	14	--	194	322
FEB								
20...	90	<.1	<1	50	7.8	--	9	.53
MAR								
26...	80	.2	<1	30	7.1	--	6	.58
APR								
30...	170	.4	<1	70	11	--	36	.39
MAY								
23...	160	.1	<1	20	5.9	.04	19	4.3
JUN								
18...	200	.2	<1	60	16	--	33	.30
JUL								
22...	280	.3	<1	250	>40	--	24	.16
AUG								
19...	170	<.1	<1	70	11	.09	48	1.1
SEP								
24...	110	.2	<1	80	20	--	72	.87

NEUSE RIVER BASIN

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	367	82	194	527	405	450	470	392	432	306	237	278
2	505	281	395	559	468	514	470	400	440	392	209	303
3	656	467	562	562	489	529	464	110	175	208	70	116
4	723	536	626	578	498	543	283	187	233	77	70	73
5	751	603	683	571	463	529	374	125	275	78	70	73
6	766	686	718	601	524	563	112	82	92	90	76	83
7	684	593	648	670	553	610	107	81	95	110	88	99
8	693	521	623	759	537	663	127	104	116	134	107	121
9	698	624	672	759	580	693	173	115	132	152	122	139
10	703	553	664	755	633	706	216	129	173	177	134	161
11	769	602	700	712	369	525	263	201	235	210	160	189
12	775	629	726	596	387	497	342	237	294	203	158	175
13	874	759	796	705	565	647	338	256	302	175	142	159
14	831	717	756	757	684	718	354	182	282	213	138	182
15	766	636	712	748	545	666	402	326	349	237	183	219
16	737	694	721	793	591	697	352	279	321	301	229	270
17	765	703	738	771	681	715	392	279	348	296	221	265
18	843	578	735	678	586	632	469	360	424	273	222	250
19	812	639	747	633	406	563	471	369	421	234	175	209
20	846	722	786	671	380	520	429	316	375	182	145	161
21	780	551	714	803	513	685	481	331	412	257	141	203
22	644	441	559	643	504	574	436	266	368	318	231	279
23	596	422	526	665	516	589	276	240	254	358	277	314
24	666	567	617	561	483	532	295	218	255	358	277	306
25	714	549	643	530	454	500	266	211	238	327	234	272
26	715	570	657	551	431	504	304	205	253	229	189	210
27	698	616	656	601	521	562	349	231	279	252	203	220
28	632	541	597	748	282	576	365	254	314	295	178	220
29	656	538	585	382	288	332	370	268	314	241	158	205
30	590	266	518	475	342	416	305	251	287	258	185	216
31	417	254	348	---	---	---	333	206	268	213	91	154
MONTH	874	82	633	803	282	575	481	81	282	392	70	198

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	80	55	61	115	91	102	191	111	157	555	457	515
2	67	56	58	112	99	105	225	166	199	595	235	482
3	66	59	62	107	95	102	257	187	227	417	98	183
4	85	66	74	133	99	115	266	213	238	128	101	115
5	105	81	91	160	123	140	314	252	282	173	121	146
6	89	65	77	163	122	143	295	192	246	255	96	195
7	74	64	69	206	141	170	217	154	184	329	213	284
8	86	70	78	214	161	183	227	156	189	429	268	365
9	92	84	88	189	142	165	262	187	229	509	361	424
10	96	88	92	166	109	134	361	234	313	536	411	474
11	117	84	102	166	117	144	414	323	363	568	403	465
12	114	59	75	214	155	181	408	356	384	478	379	441
13	78	61	69	220	171	199	365	301	334	505	366	451
14	90	72	82	226	189	206	327	250	299	517	422	477
15	101	82	93	223	164	191	297	214	264	584	447	528
16	98	83	93	201	162	178	331	234	295	560	358	454
17	98	87	94	166	138	152	268	195	232	545	411	482
18	155	87	112	271	104	166	339	228	281	592	487	547
19	139	92	120	324	174	235	397	302	338	623	559	587
20	139	113	127	320	197	239	373	283	326	726	544	627
21	157	112	138	314	164	229	344	249	294	767	646	714
22	158	116	138	244	167	205	396	307	357	715	482	597
23	162	102	121	176	123	148	464	358	423	323	89	134
24	128	103	113	134	104	121	522	416	476	146	82	121
25	153	97	126	114	87	97	591	440	489	185	132	160
26	167	70	95	111	82	96	541	400	486	235	169	204
27	85	71	78	126	92	110	586	505	547	310	210	269
28	103	82	92	163	105	132	553	476	530	403	274	352
29	---	---	---	184	121	144	461	344	393	520	368	447
30	---	---	---	142	117	130	544	377	479	484	346	409
31	---	---	---	161	111	130	---	---	---	565	431	511
MONTH	167	55	94	324	82	155	591	111	328	767	82	392

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	601	505	561	664	367	559	840	673	772	308	258	276
2	622	539	581	505	370	445	555	278	428	308	249	278
3	661	539	598	546	432	491	686	560	641	461	290	363
4	773	679	739	536	430	490	726	685	709	597	457	530
5	820	711	787	517	480	501	730	695	716	709	603	659
6	789	528	711	535	463	499	773	711	741	701	519	619
7	726	554	661	521	489	509	772	732	757	740	679	708
8	730	590	668	505	458	486	825	763	787	794	740	768
9	704	639	660	532	481	508	831	754	802	810	785	799
10	635	272	482	534	510	524	760	711	739	827	789	806
11	622	533	581	557	229	347	726	654	683	838	811	825
12	636	465	570	481	367	432	655	579	620	838	800	819
13	550	357	470	527	476	501	628	577	598	800	719	767
14	730	539	661	512	471	488	708	633	675	732	153	330
15	778	696	739	485	442	465	741	693	714	147	115	132
16	747	703	725	515	466	491	773	738	752	197	105	152
17	680	316	434	508	455	478	770	684	728	219	150	190
18	607	430	531	536	464	495	693	84	280	232	170	205
19	697	606	661	608	527	561	221	91	157	473	145	250
20	751	598	697	653	608	633	430	230	340	858	489	730
21	742	586	682	652	625	636	314	202	275	833	683	761
22	752	686	724	622	572	593	341	279	316	796	687	749
23	730	682	703	608	545	579	462	339	412	830	695	769
24	717	620	673	697	549	600	577	464	537	821	740	790
25	783	718	754	693	286	487	557	218	396	845	779	813
26	774	573	689	460	289	370	291	233	266	871	797	835
27	719	588	684	611	467	543	419	286	348	867	804	843
28	698	593	660	573	225	332	453	346	393	822	733	784
29	752	637	719	537	380	457	534	459	498	780	690	725
30	730	668	691	634	539	588	696	529	602	714	614	672
31	---	---	---	716	605	643	558	319	418	---	---	---
MONTH	820	272	650	716	225	507	840	84	552	871	105	598
YEAR	874	55	415									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	15.5	16.5	22.0	20.5	21.0	13.0	10.0	11.5	14.0	12.0	13.0
2	19.0	16.5	18.0	22.5	21.0	21.5	12.5	10.0	11.5	15.5	13.0	14.5
3	20.5	17.5	19.0	21.0	19.5	20.0	12.0	8.0	9.5	13.5	9.0	10.5
4	21.5	19.0	20.0	20.0	18.5	19.5	10.0	8.0	9.5	9.0	8.0	8.5
5	22.5	20.0	21.5	20.5	18.0	19.5	10.5	7.5	9.0	8.5	7.5	8.5
6	23.0	21.5	22.0	20.0	18.5	19.5	8.5	7.0	7.5	8.0	6.5	7.5
7	22.0	20.5	21.5	19.5	18.0	18.5	7.5	5.0	6.0	8.0	6.0	7.0
8	22.5	20.0	21.5	19.5	15.5	18.0	6.5	5.0	5.5	7.5	6.5	7.0
9	23.0	21.0	22.0	19.0	16.0	18.0	6.5	5.0	6.0	7.0	5.5	6.5
10	23.5	22.0	23.0	18.5	15.5	17.5	8.5	5.5	7.0	6.0	5.5	5.5
11	23.5	21.5	22.5	18.0	14.0	16.0	10.5	8.5	9.5	7.5	5.5	6.5
12	23.5	21.5	22.5	17.0	13.5	15.5	11.0	9.0	10.0	6.0	4.5	5.0
13	23.5	22.0	22.5	17.0	14.5	16.0	11.5	9.5	10.5	5.0	3.0	4.5
14	23.0	20.5	21.5	18.0	15.5	17.0	12.5	9.5	11.0	6.0	3.0	4.5
15	23.0	20.0	21.5	18.0	14.0	16.0	13.5	12.0	12.5	5.5	4.5	5.0
16	23.5	22.0	23.0	18.5	15.0	16.5	13.0	11.5	12.0	6.5	4.0	5.0
17	23.5	22.5	23.0	17.5	15.0	16.0	13.5	11.5	13.0	6.5	5.0	5.5
18	24.0	22.0	23.0	15.5	13.5	14.5	14.5	12.0	13.5	6.5	4.5	5.5
19	24.5	22.5	23.5	16.0	11.5	14.5	15.0	13.0	14.0	7.0	5.0	6.0
20	24.5	23.0	24.0	14.5	10.5	12.5	14.5	13.5	14.0	6.0	1.5	4.0
21	24.0	22.5	23.5	14.5	10.0	12.5	16.0	13.0	14.5	4.0	1.0	2.5
22	23.5	21.5	22.5	12.5	9.5	11.0	15.0	13.0	14.0	4.5	2.5	4.0
23	23.5	22.0	23.0	13.5	10.0	12.0	13.0	9.5	11.0	5.0	3.0	4.0
24	24.5	23.0	23.5	13.0	10.0	11.5	10.0	8.0	9.0	5.0	3.0	4.0
25	24.0	22.5	23.5	13.0	10.0	11.5	11.0	9.0	10.0	5.5	2.5	4.0
26	24.0	22.5	23.5	14.5	10.0	12.5	10.0	7.5	9.0	3.5	1.5	2.5
27	24.0	22.5	23.5	15.5	13.0	14.5	12.0	9.0	10.5	4.0	2.0	3.0
28	24.0	22.5	23.0	16.5	10.5	14.5	13.0	10.0	11.5	5.0	2.0	3.0
29	24.0	22.5	23.5	12.0	10.5	11.0	13.0	10.5	12.0	4.0	1.0	3.0
30	23.5	20.0	23.0	13.0	10.0	11.5	13.0	11.0	12.5	5.0	3.0	4.0
31	21.5	19.5	21.0	---	---	---	13.5	11.5	12.5	5.0	4.0	4.5
MONTH	24.5	15.5	22.0	22.5	9.5	15.5	16.0	5.0	10.5	15.5	1.0	6.0

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5.0	4.5	4.5	10.0	7.0	8.5	17.0	14.5	16.0	21.5	18.5	20.0
2	5.0	4.5	4.5	11.5	8.5	10.0	15.5	12.5	14.0	21.5	19.5	20.5
3	5.5	4.0	4.5	12.0	9.5	10.5	15.0	10.5	13.0	20.5	17.0	18.0
4	5.5	3.5	4.5	12.5	10.0	11.5	17.5	13.0	15.0	18.5	15.0	17.0
5	4.0	3.5	4.0	14.0	12.5	13.0	18.5	15.5	17.5	19.5	16.5	18.0
6	5.0	4.0	4.0	12.5	9.5	10.5	18.5	17.0	17.5	20.5	17.0	18.5
7	5.5	4.0	4.5	11.0	8.0	9.5	17.0	14.0	16.0	21.0	18.5	20.0
8	4.0	2.0	3.0	13.5	9.0	11.0	15.0	12.5	14.0	20.5	19.5	20.0
9	3.5	1.0	2.5	14.0	12.0	13.0	13.5	11.0	12.5	20.5	18.5	19.5
10	4.5	1.5	3.0	13.0	9.5	11.0	13.5	10.5	12.5	21.5	19.5	20.5
11	6.0	2.0	3.5	11.0	9.5	10.0	16.0	12.5	14.0	22.0	20.5	21.0
12	6.0	4.0	5.0	15.0	11.0	12.5	17.5	14.5	16.5	21.5	20.5	21.0
13	5.5	3.5	4.0	14.0	10.5	12.5	18.0	16.0	17.5	22.5	20.5	21.5
14	5.5	2.5	4.0	13.5	11.0	12.5	18.0	17.0	17.5	23.0	21.5	22.5
15	5.0	2.5	3.5	14.0	11.0	12.5	18.0	16.5	17.5	23.5	22.0	22.5
16	4.5	1.5	3.5	12.5	9.0	11.0	19.0	17.5	18.0	23.0	22.0	22.0
17	5.5	2.5	4.0	12.5	10.5	11.5	20.0	17.0	18.0	22.5	21.0	21.5
18	6.5	3.0	5.0	11.5	9.0	10.0	20.0	15.5	18.0	21.5	20.5	21.0
19	6.5	4.5	5.5	11.5	7.0	9.0	21.5	18.0	19.5	22.0	20.0	21.0
20	7.5	6.0	6.5	12.5	8.5	10.5	22.0	19.0	20.5	22.5	20.5	21.5
21	7.0	4.5	6.0	12.0	10.0	11.0	22.0	18.5	20.5	23.5	22.0	23.0
22	9.0	6.0	7.5	10.5	8.0	9.0	21.0	19.0	20.0	22.5	21.5	22.5
23	10.0	7.0	8.5	11.0	7.0	9.0	21.0	19.0	20.5	25.0	19.5	23.0
24	12.5	9.0	10.5	11.0	10.0	10.5	21.5	19.5	20.5	23.0	20.5	21.5
25	12.0	11.0	11.5	12.0	9.0	10.5	22.0	20.0	21.0	21.5	19.0	20.0
26	11.5	9.5	10.5	13.0	8.0	10.5	21.5	19.0	20.5	21.5	18.5	20.5
27	12.0	9.0	10.0	14.0	8.5	11.5	21.5	19.5	20.5	21.5	19.5	20.5
28	11.0	7.5	9.0	17.0	10.0	13.5	22.0	20.0	21.0	22.0	20.0	21.0
29	---	---	---	18.0	13.5	15.5	21.0	19.5	20.0	22.0	20.5	21.5
30	---	---	---	19.5	16.0	17.5	20.5	18.0	19.5	21.5	20.0	21.0
31	---	---	---	17.0	14.0	16.0	---	---	---	22.5	21.0	22.0
MONTH	12.5	1.0	5.5	19.5	7.0	11.5	22.0	10.5	17.5	25.0	15.0	21.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	22.5	23.0	25.0	22.5	24.0	29.0	26.5	28.0	24.0	23.0	23.5
2	23.5	22.0	23.0	24.5	22.5	23.5	26.5	24.5	25.5	25.0	22.5	24.0
3	24.0	22.5	23.0	25.5	23.5	24.0	26.5	25.5	26.0	26.5	23.5	25.0
4	25.0	23.5	24.0	26.0	23.5	24.5	27.0	25.0	26.0	27.5	25.0	26.5
5	25.5	24.5	25.0	26.0	24.0	25.0	27.0	25.0	26.0	29.0	26.0	27.5
6	26.0	24.5	25.0	25.5	24.5	25.0	27.5	26.0	26.5	29.5	25.5	27.5
7	25.5	24.5	25.0	26.0	24.5	25.0	28.0	26.5	27.5	29.5	27.5	29.0
8	26.0	24.0	25.0	26.0	24.0	25.0	29.0	27.0	28.0	30.0	27.5	29.0
9	25.5	24.5	25.0	26.0	24.5	25.5	29.5	28.0	28.5	30.0	27.5	29.0
10	25.0	23.0	24.5	26.0	25.0	25.5	30.5	27.5	28.5	30.0	28.0	29.0
11	26.0	24.5	25.5	25.0	22.5	24.0	30.0	26.5	28.0	29.5	27.5	28.5
12	26.0	24.5	25.5	25.5	24.0	25.0	30.5	26.5	28.5	27.5	26.0	26.5
13	24.5	23.0	24.0	26.5	25.0	25.5	30.5	27.5	29.0	25.5	24.0	25.0
14	25.5	23.5	24.5	26.0	24.5	25.5	31.0	28.0	29.5	23.5	17.5	18.5
15	26.5	24.0	25.5	26.5	24.5	25.5	31.5	28.0	29.5	19.5	17.5	18.5
16	26.0	25.0	25.5	27.0	25.0	26.0	31.0	28.0	29.5	20.5	18.0	19.0
17	25.0	22.5	24.0	26.0	25.5	25.5	30.0	28.0	29.0	20.5	18.5	19.5
18	26.5	24.5	25.5	26.5	25.0	25.5	28.5	23.5	25.5	21.5	19.0	20.0
19	26.5	25.5	26.0	27.0	24.5	26.0	25.5	24.0	24.5	22.5	19.5	20.5
20	26.5	25.5	26.0	28.0	25.5	27.0	26.5	25.0	25.5	25.5	22.0	24.0
21	26.5	24.5	25.5	29.0	26.5	27.5	25.5	24.0	24.5	25.5	23.0	24.5
22	26.5	25.0	26.0	28.0	26.5	27.0	25.0	24.5	24.5	25.5	24.0	24.5
23	26.5	25.0	26.0	26.5	25.5	26.0	25.5	24.0	24.5	25.5	23.5	24.5
24	27.0	25.0	26.0	26.5	25.5	26.0	26.0	25.0	25.5	26.0	24.0	25.0
25	27.0	25.5	26.0	26.0	23.5	24.5	25.5	23.0	24.0	25.5	24.5	25.0
26	26.5	25.5	26.0	26.0	24.0	25.0	24.5	23.5	24.0	25.5	24.0	25.0
27	26.5	24.5	25.5	27.0	26.0	26.0	26.0	23.5	25.0	25.5	24.5	25.0
28	26.0	24.5	25.5	25.5	23.5	24.0	26.0	24.0	25.0	25.0	22.0	23.5
29	26.0	24.5	25.5	26.0	24.5	25.5	27.0	24.5	25.5	24.5	22.0	23.0
30	25.5	24.5	25.0	27.5	25.5	26.5	28.5	25.5	26.5	24.0	21.5	23.0
31	---	---	---	29.0	26.5	27.5	25.5	23.5	24.5	---	---	---
MONTH	27.0	22.0	25.0	29.0	22.5	25.5	31.5	23.0	26.5	30.0	17.5	24.5
YEAR	31.5	1.0	17.5									

02086624 KNAP OF REEDS CREEK NEAR BUTNER, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/26	0930	WATER	0	2.51	4	600	6.80	23.0		5.0	10K
84/11/13	0900	WATER	0	2.55	4	430	6.70	15.0	17.0	6.8	10K
84/12/10	0940	WATER	0	2.92	11	105	7.50	6.0		10.2	10K
85/01/22	0940	WATER	0	2.64	8	160		4.0		9.5	10K
85/02/12	0945	WATER	0	6.04	522	42	6.90	5.0	90.0	11.2	170
85/03/19	0850	WATER	0	2.58	8	141	6.90	9.0		9.3	10K
85/04/11	0845	WATER	0	2.36	5	290	6.90	12.0		8.3	10K
85/05/16	0920	WATER	0	2.24	4	390	6.80	22.0	40.0	5.6	10K
85/06/20	0820	WATER	0	2.32	2	670	6.90	23.0		5.0	10K
85/07/17	0900	WATER	0.1	2.63	3	450	6.90	25.0		5.7	10K
85/08/26	0940	WATER	0.1	2.44	5	225	6.90	22.0	50.0	6.0	10K
85/09/20	0915	WATER	0.1	2.25	3	710	6.90	23.0		6.2	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/26	0930	WATER	0	126	38	460	3.10	2.700	4.400	5.200	4.200
84/11/13	0900	WATER	0	71	18	410	12.00	.160	2.200	5.700	4.900
84/12/10	0940	WATER	0	36	11	140	2.00	.560	1.300	1.100	1.000
85/01/22	0940	WATER	0		20	230	.34	2.800	4.600	1.100	.840
85/02/12	0945	WATER	0	79	140	250	.20	.250	.900	.300	.120
85/03/19	0850	WATER	0	61	14	180	1.50	4.600	6.300	2.700	1.900
85/04/11	0845	WATER	0	78	8	280	.35	2.400	4.000	4.100	3.300
85/05/16	0920	WATER	0	60			3.10	.240	2.300	3.900	2.900
85/06/20	0820	WATER	0	100	38	450	.82	8.600	11.000	5.600	3.900
85/07/17	0900	WATER	0.1	72	9	330	3.60	1.200	2.300	1.300	1.100
85/08/26	0940	WATER	0.1	35	39	230	2.90	.290	1.900	1.800	1.600
85/09/20	0915	WATER	0.1	78	40	510	.83	3.300	4.800	8.000	5.900

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/13	0900	WATER	0	10K	20K	50K	150	100K	.2K	100K	30
84/12/10	0940	WATER	0				30				
85/01/22	0940	WATER	0				40				
85/02/12	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/03/19	0850	WATER	0				70				
85/04/11	0845	WATER	0				60				
85/05/16	0920	WATER	0	10K	20K	50K	130	100K	.2K	100K	50
85/06/20	0820	WATER	0				70				
85/07/17	0900	WATER	0.1				40				
85/08/26	0940	WATER	0.1	10K	20K	50K	20	100K	.2K	100K	20K
85/09/20	0915	WATER	0.1				130				

K Less than noted value.

NEUSE RIVER BASIN

02086849 ELLERBE CREEK NEAR GORMAN, NC

LOCATION.--Lat 36°03'33", long 78°49'58", Durham County, Hydrologic Unit 03020201, on left bank 10 ft upstream of bridge on Secondary Road 1636, 1.6 mi northwest of Gorman, and 3 mi upstream from mouth.

DRAINAGE AREA.--21.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 245 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. An average of 30.4 ft^3/s was diverted from Flat River for Durham municipal water supply, of which an average of 10.5 ft^3/s was returned as sewage effluent upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft^3/s May 20, 1983, Apr. 5, 1984, gage height 11.03 ft; minimum, 1.9 ft^3/s Oct. 9, 17, 1983, gage height, 0.77 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	0415	*1,950	*9.35	Aug. 18	1945	1,050	5.98

Minimum discharge, 3.3 ft^3/s June 9, 10, gage height, 0.79 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	14	11	8.4	728	28	12	11	11	75	108	9.3
2	19	14	9.0	62	453	25	13	11	7.1	20	41	8.6
3	12	11	169	464	134	20	13	229	9.3	13	15	10
4	11	11	20	333	163	20	14	21	11	11	10	12
5	11	19	145	86	237	21	14	12	13	9.4	11	13
6	10	13	89	33	280	18	12	12	14	11	14	12
7	8.0	11	24	25	297	17	8.5	12	15	20	14	11
8	9.7	13	17	22	269	18	10	11	12	9.6	14	8.2
9	11	16	13	18	175	16	12	12	7.6	11	15	9.8
10	12	12	14	18	92	14	12	12	7.3	11	12	13
11	12	32	15	18	41	14	13	11	8.5	11	9.7	12
12	14	11	14	14	328	17	14	15	13	11	11	11
13	13	14	13	12	76	18	11	12	e21	10	13	12
14	9.6	19	13	14	43	18	9.6	12	e19	66	12	11
15	11	19	12	16	31	18	13	12	e10	10	13	8.5
16	13	19	9.1	15	24	16	14	121	e13	22	12	11
17	15	19	11	31	22	14	18	20	e10	20	11	12
18	15	15	13	21	20	15	13	15	e22	11	315	12
19	16	29	13	16	20	16	12	10	e21	11	44	12
20	15	16	14	14	21	16	10	10	11	9.7	38	12
21	26	12	16	31	18	16	8.6	24	10	9.9	189	9.9
22	19	9.6	17	13	18	41	10	32	9.1	18	26	12
23	16	9.6	10	16	18	36	12	170	6.9	33	17	12
24	14	9.5	9.1	15	16	34	11	22	8.4	12	13	13
25	12	7.8	7.8	16	17	49	11	15	9.9	137	140	14
26	12	9.7	8.7	18	311	23	12	10	10	24	49	13
27	11	12	10	19	60	20	10	9.3	10	30	23	14
28	9.8	50	11	28	35	17	8.2	10	11	97	19	11
29	14	23	11	31	---	17	11	14	92	26	15	8.8
30	33	13	9.2	23	---	15	11	11	27	26	14	11
31	20	---	8.6	155	---	11	---	12	---	15	14	---
TOTAL	612.1	483.2	756.5	1605.4	3947	638	352.9	910.3	450.1	800.6	1251.7	339.1
MEAN	19.7	16.1	24.4	51.8	141	20.6	11.8	29.4	15.0	25.8	40.4	11.3
MAX	188	50	169	464	728	49	18	229	92	137	315	14
MIN	8.0	7.8	7.8	8.4	16	11	8.2	9.3	6.9	9.4	9.7	8.2
CFSM	.90	.74	1.11	2.37	6.44	.94	.54	1.34	.68	1.18	1.84	.52
IN.	1.04	.82	1.29	2.73	6.70	1.08	.60	1.55	.76	1.36	2.13	.58

CAL YR 1984	TOTAL	19441.9	MEAN	53.1	MAX	752	MIN	7.8	CFSM 2.42	IN.	33.02
WTR YR 1985	TOTAL	12146.9	MEAN	33.3	MAX	728	MIN	6.9	CFSM 1.52	IN.	20.63

e Estimated

02086849 ELLERBE CREEK NEAR GORMAN, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to September 1985.
WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the Falls Lake. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemical and biological data shown in the last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 858 microsiemens Jan. 30, 1985; minimum, 24 microsiemens May 20, 1983.
WATER TEMPERATURE: Maximum, 33.5°C June 21, 1985; minimum, 0.0°C Jan. 21, 22, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 858 microsiemens Jan. 30; minimum, 47 microsiemens Aug. 18.
WATER TEMPERATURE: Maximum, 33.5°C June 21; minimum, 0.0°C Jan. 21, 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
23...	1405	15	460	7.0	22.5	25	759	1.6	19	510	360
DEC											
04...	1440	19	370	6.8	9.0	20	763	8.7	75	--	--
19...	0920	8.6	550	7.1	14.0	30	756	6.0	59	K68	150
JAN											
03...	0945	806	92	6.3	9.0	150	759	10.8	94	--	--
FEB											
20...	1550	22	395	7.2	10.0	10	764	10.3	91	<4	<4
MAR											
26...	0935	18	360	6.4	9.0	40	767	8.8	76	--	--
APR											
30...	1345	6.9	500	7.4	17.5	30	761	3.3	35	80	>200
MAY											
23...	0855	73	120	6.0	20.0	300	750	7.0	78	--	--
JUN											
18...	0940	5.0	525	6.5	24.5	30	749	4.5	55	--	--
JUL											
22...	1415	12	309	6.8	26.0	30	761	4.0	49	--	--
AUG											
18...	1945	1040	50	6.4	25.0	300	751	7.6	93	--	--
SEP											
24...	1400	10	508	6.4	22.0	35	754	--	--	--	410

K Results based on colony count outside the acceptable range (non-ideal colony count).

02086849 ELLERBE CREEK NEAR GORMAN, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SCLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT											
23...	46	11	12	3.8	55	67	4	10	29	45	1.5
DEC											
04...	52	0	14	4.1	37	57	2	7.8	29	36	.70
19...	55	0	14	4.8	61	66	4	10	38	44	1.4
JAN											
03...	22	1	6.1	1.7	4.8	29	.5	2.4	9.6	5.0	.10
FEB											
20...	66	0	17	5.6	37	52	2	8.0	35	30	.60
MAR											
26...	49	29	13	4.1	33	56	2	5.7	28	27	.70
APR											
30...	48	14	12	4.4	66	70	4	9.7	40	46	1.6
MAY											
23...	26	13	7.3	2.0	9.9	41	.9	3.5	17	9.1	.20
JUN											
18...	43	39	11	3.7	59	71	4	8.0	84	49	1.0
JUL											
22...	40	27	11	3.1	39	64	3	6.4	47	24	.50
AUG											
18...	12	4	3.4	.91	3.0	30	.4	2.2	6.3	3.6	.10
SEP											
24...	39	0	9.9	3.4	66	73	5	11	39	47	1.5

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT											
23...	14	244	190	.33	9.9	.67	.430	1.1	--	7.90	--
DEC											
04...	12	187	190	.25	9.6	1.3	.400	1.7	--	11.0	--
19...	17	310	280	.42	7.2	1.1	.690	1.8	1.8	16.0	--
JAN											
03...	5.0	69	47	.09	150	.55	.050	.60	--	.490	--
FEB											
20...	14	201	210	.27	12	.81	.190	1.0	--	7.90	--
MAR											
26...	12	282	140	.38	14	1.7	.230	1.9	--	--	--
APR											
30...	16	288	220	.39	5.4	5.5	.500	6.0	--	8.10	--
MAY											
23...	5.9	89	65	.12	18	1.3	.150	1.4	1.5	.710	.580
JUN											
18...	13	307	230	.42	4.1	4.8	.480	5.3	--	12.0	--
JUL											
22...	8.3	201	150	.27	6.5	7.7	.240	7.9	--	1.10	--
AUG											
18...	2.9	36	28	.05	101	.94	.060	1.0	.46	.360	.290
SEP											
24...	12	314	210	.43	8.5	9.2	.730	9.9	--	7.80	--

02086849 ELLERBE CREEK NEAR GORMAN, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT										
23...	--	5.1	--	13	--	--	14	62	--	4.50
DEC										
04...	--	13	--	24	--	--	26	110	--	2.40
19...	--	2.0	--	18	4.0	14	20	88	16	5.60
JAN										
03...	--	2.4	--	2.9	--	--	3.5	15	--	.750
FEB										
20...	--	4.1	--	12	--	--	13	58	--	2.20
MAR										
26...	--	--	--	9.8	--	--	12	52	--	3.10
APR										
30...	--	2.9	--	11	--	--	17	75	--	6.20
MAY										
23...	.75	.39	--	1.1	--	--	2.5	11	--	.270
JUN										
18...	--	1.0	--	13	--	--	18	81	--	1.00
JUL										
22...	--	1.6	--	2.7	--	--	11	47	--	.430
AUG										
18...	.37	1.7	1.3	2.1	.50	1.6	3.1	14	2.1	.190
SEP										
24...	--	1.6	--	9.4	--	--	19	85	--	5.90

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT										
23...	--	4.20	--	--	2	1	10	11	990	2
DEC										
04...	--	2.10	--	--	2	1	20	12	990	8
19...	5.30	5.20	5.20	16	1	<1	30	9	570	1
JAN										
03...	--	.200	--	--	2	1	20	31	12000	50
FEB										
20...	--	2.00	--	--	<1	1	10	7	630	6
MAR										
26...	--	2.30	--	--	1	<1	10	13	860	<1
APR										
30...	--	5.70	--	--	1	1	10	7	590	1
MAY										
23...	.170	.220	.150	.46	<1	1	10	17	5300	29
JUN										
18...	--	.780	--	--	1	<1	20	14	590	2
JUL										
22...	--	.340	--	--	2	1	10	16	2100	21
AUG										
18...	.090	.180	.080	.25	1	1	50	63	19000	100
SEP										
24...	--	6.10	--	--	1	2	10	14	290	10

02086849 ELLERBE CREEK NEAR GORMAN, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT								
23...	250	<.1	<1	50	17	--	11	.45
DEC								
04...	180	.1	<1	80	23	--	23	1.2
19...	150	.8	<1	60	16	.31	7	.16
JAN								
03...	560	.2	<1	170	12	--	--	--
FEB								
20...	240	.1	<1	70	11	--	10	.59
MAR								
26...	110	.2	<1	90	13	--	24	1.2
APR								
30...	200	.4	<1	30	16	--	--	--
MAY								
23...	310	.3	<1	90	10	.08	267	53
JUN								
18...	170	.1	<1	30	16	--	13	.18
JUL								
22...	180	.1	<1	110	5.9	--	67	2.2
AUG								
18...	660	.3	<1	320	19	.04	1840	5170
SEP								
24...	50	<.1	<1	70	13	--	9	.24

NEUSE RIVER BASIN

02086849 ELLERBE CREEK NEAR GORMAN, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	265	97	172	469	409	449	524	476	502	---	---	---
2	387	275	334	492	438	463	502	474	489	---	---	---
3	444	387	423	531	490	515	433	273	310	---	---	---
4	486	445	464	534	494	517	420	288	357	133	102	116
5	486	461	474	504	361	408	465	287	408	180	125	150
6	505	469	486	491	413	455	295	271	279	242	184	212
7	519	472	499	550	492	523	358	295	324	290	244	265
8	491	478	483	520	474	495	428	365	403	333	291	314
9	529	474	500	506	429	470	448	431	439	781	334	357
10	524	483	504	520	468	501	454	425	439	413	383	399
11	542	481	514	508	212	349	504	453	484	425	410	416
12	537	483	514	458	305	385	514	477	498	439	425	434
13	523	482	503	501	467	484	528	488	509	450	437	443
14	527	483	502	533	484	513	550	507	529	454	450	452
15	518	503	510	536	518	529	540	482	516	471	456	462
16	527	494	513	565	535	550	534	485	515	483	471	475
17	534	491	517	561	527	546	535	504	522	489	414	461
18	507	481	494	562	537	550	554	507	532	413	399	403
19	563	489	521	558	263	489	561	511	536	420	402	408
20	577	513	551	449	284	381	560	496	527	433	419	428
21	601	286	510	513	455	487	500	468	488	440	432	435
22	505	304	410	541	500	520	528	417	475	453	442	445
23	479	404	448	538	497	514	496	430	465	491	453	469
24	512	480	499	539	488	511	492	479	488	502	489	495
25	556	500	533	553	526	538	521	476	501	491	478	482
26	540	526	534	550	530	540	473	436	454	480	461	467
27	534	506	524	574	533	551	528	466	501	465	435	445
28	594	516	564	575	305	498	529	496	510	449	406	437
29	528	485	510	391	308	334	536	480	507	741	472	559
30	476	203	395	473	395	436	---	---	---	858	657	794
31	405	224	310	---	---	---	---	---	---	640	223	420
MONTH	601	97	475	575	212	483	561	271	466	858	102	416

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	218	93	131	300	259	282	519	471	487	496	478	490
2	137	103	113	324	279	303	538	518	526	491	474	484
3	188	140	166	326	294	312	533	513	522	465	89	191
4	249	191	218	346	306	327	503	442	479	377	239	304
5	272	181	239	349	304	333	532	445	488	444	379	405
6	194	188	191	360	316	344	513	462	492	456	435	446
7	240	194	215	379	353	365	485	459	473	479	447	466
8	282	242	262	408	348	383	484	457	475	483	454	466
9	313	283	298	390	341	370	495	462	478	566	476	515
10	323	313	318	410	371	391	488	455	472	494	451	480
11	335	314	323	402	376	395	494	453	470	516	450	493
12	342	125	169	430	391	413	509	454	486	469	374	416
13	256	182	213	445	409	425	545	510	531	439	402	422
14	303	262	276	437	418	429	536	516	529	478	437	461
15	346	282	311	450	438	443	513	477	492	503	445	480
16	371	327	354	467	444	458	487	451	472	445	110	214
17	386	348	371	476	457	467	487	375	412	357	249	311
18	391	353	373	480	463	468	449	413	433	391	336	368
19	423	382	406	498	485	491	488	434	462	424	389	409
20	434	396	418	507	498	502	451	413	440	476	426	441
21	447	402	429	501	475	488	455	415	437	503	220	465
22	464	419	447	481	260	393	438	426	433	371	193	268
23	457	423	440	321	213	250	465	435	447	260	78	160
24	446	408	430	365	234	319	475	437	453	390	272	321
25	424	396	415	312	188	238	455	430	446	455	400	433
26	409	70	122	395	319	355	557	446	497	482	450	465
27	227	154	186	418	365	393	492	459	482	500	467	487
28	269	222	241	426	395	416	473	463	467	575	483	518
29	---	---	---	445	420	433	478	419	461	597	479	532
30	---	---	---	461	420	444	519	477	497	575	541	561
31	---	---	---	482	443	464	---	---	---	592	540	571
MONTH	464	70	288	507	188	390	557	375	475	597	78	421

02086849 ELLERBE CREEK NEAR GORMAN, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	589	546	576	419	135	262	454	81	366	460	416	439
2	593	554	583	437	262	351	296	118	205	433	409	424
3	596	566	580	542	446	492	413	307	371	459	421	438
4	610	555	591	561	450	516	450	417	432	471	439	456
5	592	535	575	564	501	528	478	437	452	472	434	451
6	567	442	491	562	505	530	517	474	496	478	442	467
7	545	434	474	576	285	374	513	467	498	487	446	467
8	545	487	522	529	434	486	515	466	499	476	464	470
9	563	526	550	543	490	523	493	459	483	497	447	477
10	565	530	545	533	491	516	493	442	477	471	443	456
11	575	525	553	527	459	504	466	422	456	458	434	448
12	550	259	481	546	471	514	441	418	433	472	446	457
13	480	262	364	547	493	527	469	436	449	475	455	465
14	549	482	516	330	102	187	469	436	453	467	445	455
15	567	509	547	478	342	403	491	435	465	516	444	476
16	553	524	541	542	165	487	510	462	490	503	474	492
17	528	421	468	436	162	293	527	447	504	503	459	487
18	544	107	381	511	440	482	442	47	108	497	481	491
19	452	222	335	519	470	500	272	100	183	496	480	489
20	555	457	509	501	466	484	356	64	318	522	477	506
21	577	548	563	491	455	473	214	65	139	523	486	507
22	567	526	550	496	249	360	324	223	269	520	446	494
23	573	551	559	427	170	261	406	333	378	479	434	452
24	584	547	569	506	435	477	408	382	399	511	472	492
25	589	547	576	504	62	209	402	84	171	516	471	492
26	587	539	560	334	166	249	257	113	180	504	470	486
27	618	542	564	413	58	371	345	271	321	485	463	474
28	615	551	578	274	56	162	401	350	378	502	474	490
29	586	104	449	411	165	327	413	374	397	514	498	507
30	359	140	226	385	157	286	417	385	406	509	484	495
31	---	---	---	467	395	442	442	371	409	---	---	---
MONTH	618	104	513	576	56	406	527	47	374	523	409	473
YEAR	858	47	432									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.0	16.5	17.5	20.5	19.0	20.0	12.0	10.0	10.5	---	---	---
2	18.0	15.0	17.0	21.0	19.0	20.0	11.5	8.5	10.0	---	---	---
3	19.5	14.5	16.5	19.5	15.0	16.5	11.0	8.5	10.0	---	---	---
4	21.5	16.0	18.0	18.0	15.0	15.5	11.0	9.0	10.0	8.5	7.0	7.5
5	22.5	18.0	19.5	19.0	15.5	17.0	11.0	6.5	9.0	8.5	7.5	8.0
6	22.0	19.0	20.5	18.5	15.0	16.0	8.5	6.5	7.5	8.0	2.5	6.5
7	21.0	18.0	19.0	15.0	12.5	13.0	8.0	5.5	6.5	9.0	5.5	7.0
8	22.0	19.0	20.0	14.0	10.5	12.0	8.5	6.0	7.0	8.5	6.5	7.5
9	22.5	18.5	20.0	15.0	11.5	13.0	9.0	6.5	7.5	8.0	6.0	7.0
10	22.0	19.5	20.5	15.5	11.5	13.5	11.0	8.0	9.0	7.0	5.5	6.0
11	22.0	19.0	20.0	16.0	13.5	15.5	12.5	10.5	11.0	8.5	5.5	7.0
12	21.5	18.5	19.5	14.5	11.5	12.5	12.0	9.5	11.0	7.0	5.0	6.0
13	20.5	18.0	19.0	12.0	10.0	10.5	14.0	10.5	12.0	7.0	4.5	5.5
14	20.5	17.0	18.5	13.0	10.5	11.5	15.0	11.5	13.0	7.0	4.5	5.5
15	21.0	17.0	18.5	14.0	10.0	11.5	15.0	12.5	13.5	7.0	5.0	5.5
16	23.0	19.0	20.5	15.0	13.5	14.0	14.0	12.5	13.5	7.5	4.0	5.0
17	22.5	20.0	21.0	14.5	10.5	11.5	15.0	13.5	14.0	7.5	4.5	6.0
18	23.0	21.0	21.5	11.0	9.0	10.0	16.0	12.5	14.0	7.5	4.5	5.5
19	24.5	21.0	22.5	13.5	10.0	11.5	16.5	14.0	15.0	8.0	7.0	7.5
20	24.5	21.5	22.5	10.0	9.5	10.0	15.5	14.5	15.0	8.0	1.5	5.0
21	24.5	22.0	22.5	10.0	7.5	8.5	16.5	15.0	15.5	1.0	.0	.0
22	24.5	21.0	22.0	10.0	8.0	8.5	16.0	13.0	15.0	4.5	.0	1.5
23	23.5	22.0	22.5	10.5	7.5	8.5	12.5	9.5	11.0	5.5	1.5	3.5
24	24.0	21.5	22.5	10.5	7.5	9.0	12.0	8.0	10.0	7.5	3.0	4.5
25	23.5	21.0	21.5	10.5	8.0	9.0	13.0	9.5	12.0	7.5	4.0	5.5
26	22.5	20.0	21.0	12.0	8.5	10.0	11.5	8.0	9.5	6.5	2.5	4.0
27	22.5	19.0	20.5	15.0	10.0	11.5	13.5	11.0	12.0	5.5	1.5	3.5
28	23.5	21.5	22.5	15.5	12.5	14.5	14.5	10.5	12.5	5.5	2.5	5.0
29	24.0	22.5	23.0	12.5	10.0	11.0	15.0	12.0	13.5	6.5	2.5	4.0
30	23.0	19.5	21.0	12.0	8.5	10.0	---	---	---	7.5	4.5	5.5
31	21.0	19.5	20.5	---	---	---	---	---	---	7.0	4.5	6.0
MONTH	24.5	14.5	20.5	21.0	7.5	12.5	16.5	5.5	11.5	9.0	.0	5.5

02086849 ELLERBE CREEK NEAR GORMAN, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	5.0	5.5	11.5	7.5	9.5	19.5	15.5	17.5	24.5	18.0	20.5
2	6.0	5.5	5.5	14.0	9.5	11.5	17.0	13.0	15.0	23.5	19.5	21.0
3	7.0	5.0	5.5	13.5	9.5	11.5	18.0	11.5	14.5	22.0	17.0	19.0
4	7.0	4.0	5.5	14.5	10.5	12.0	21.0	13.0	16.5	21.5	14.5	17.5
5	5.5	3.0	4.5	17.5	13.0	15.0	21.0	15.5	18.0	22.5	15.5	18.5
6	6.0	4.0	5.0	14.0	10.0	12.0	20.0	16.5	18.5	25.0	18.0	21.0
7	7.5	5.0	6.0	13.0	7.5	10.0	18.0	14.5	16.5	25.0	19.5	22.0
8	6.0	3.0	4.5	16.5	9.5	12.5	17.5	13.0	15.0	23.0	19.5	20.5
9	5.5	2.0	3.5	15.0	13.0	14.0	15.0	11.0	13.0	21.0	18.0	19.5
10	7.5	3.0	4.5	14.5	9.5	12.0	15.5	9.5	12.0	24.5	19.5	21.0
11	8.0	4.0	5.5	13.0	9.5	11.0	19.0	11.0	14.5	24.0	21.0	22.5
12	8.0	5.0	6.0	16.0	12.0	14.0	21.0	14.5	17.5	23.5	20.5	22.0
13	7.0	3.0	5.0	16.5	10.5	13.0	21.0	15.5	18.0	26.5	20.5	23.0
14	7.5	3.5	5.5	14.5	11.5	13.5	20.5	17.5	18.0	27.5	21.5	24.0
15	8.0	4.0	6.0	15.5	11.5	13.5	19.5	16.5	18.0	26.5	22.0	24.0
16	8.0	3.5	5.5	14.5	9.5	12.0	20.0	17.5	18.5	25.5	20.5	22.0
17	8.5	5.0	6.5	14.5	12.0	13.5	21.0	16.0	18.5	23.0	20.0	21.0
18	9.0	5.0	7.0	13.0	9.5	11.0	22.0	14.5	18.0	24.0	19.0	20.5
19	10.5	7.5	8.5	14.0	7.5	10.5	24.0	17.0	20.0	24.5	18.5	21.0
20	12.0	8.5	9.5	15.5	9.5	12.0	24.5	17.5	20.5	25.5	19.0	22.0
21	11.5	6.5	8.5	14.5	11.5	12.0	24.0	18.0	21.0	26.0	21.5	23.0
22	13.0	8.5	10.5	11.5	8.0	9.0	24.0	18.0	21.0	24.0	21.0	22.5
23	14.5	9.5	11.5	13.5	8.0	10.0	24.0	17.5	20.5	24.0	20.0	21.5
24	17.5	11.5	14.0	13.0	11.0	12.0	23.5	18.0	20.5	22.5	19.0	20.0
25	16.5	14.5	15.5	13.0	9.5	11.0	24.0	19.5	21.5	24.0	18.0	20.0
26	14.5	11.0	12.0	16.0	9.0	12.0	24.0	17.5	20.5	24.5	19.0	21.0
27	14.0	11.0	12.0	18.0	10.5	13.5	22.5	18.5	20.5	25.5	20.0	22.5
28	13.0	8.5	10.5	20.5	12.5	16.0	24.0	20.0	22.0	25.5	20.5	22.5
29	---	---	---	22.5	16.0	19.0	23.5	19.5	21.5	24.5	21.0	22.5
30	---	---	---	23.0	18.0	20.0	23.5	16.5	19.5	24.5	20.0	22.0
31	---	---	---	20.0	15.5	17.5	---	---	---	25.5	20.5	22.5
MONTH	17.5	2.0	7.5	23.0	7.5	13.0	24.5	9.5	18.0	27.5	14.5	21.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.5	23.0	24.5	27.0	25.0	26.0	28.0	25.5	26.5	25.5	22.5	23.5
2	27.0	23.0	24.5	26.5	24.5	25.0	26.5	24.0	25.0	25.5	22.0	23.5
3	27.0	22.5	24.5	27.5	24.0	25.0	25.5	22.5	24.0	26.5	22.5	24.0
4	27.5	23.0	24.5	28.0	24.0	25.5	25.5	22.0	23.5	27.5	23.5	25.0
5	28.5	24.0	26.0	27.5	25.0	26.0	26.5	22.5	24.0	27.5	23.5	25.5
6	26.5	24.5	25.5	26.5	24.5	25.5	26.5	23.5	25.0	27.5	24.0	25.5
7	25.5	23.5	24.0	27.5	24.0	25.5	28.0	24.5	26.0	27.0	24.0	25.5
8	27.0	22.5	24.0	28.0	23.5	25.5	27.5	25.5	26.0	27.5	24.0	25.5
9	27.0	23.0	25.0	27.5	24.0	25.5	28.0	25.0	26.0	27.5	24.0	25.5
10	29.0	24.0	26.0	28.5	24.5	26.0	28.0	25.5	26.5	28.0	24.5	26.0
11	28.0	25.0	26.5	28.5	24.0	26.0	28.0	24.5	26.0	27.0	24.5	25.5
12	27.5	24.5	25.5	27.5	24.5	25.5	28.5	25.5	26.5	25.0	21.5	22.5
13	24.5	21.0	23.0	27.5	24.5	25.5	29.0	25.0	26.5	22.0	20.0	20.5
14	24.5	19.0	21.5	26.5	23.5	24.5	28.5	25.5	27.0	21.0	17.5	19.0
15	25.5	20.5	22.5	29.0	24.0	26.0	28.0	25.0	26.0	20.5	17.0	18.5
16	25.5	23.0	24.0	28.0	25.0	26.0	27.5	24.5	26.0	22.0	17.5	19.5
17	28.0	22.5	24.5	27.0	24.5	25.5	27.0	25.0	25.5	22.5	18.0	19.5
18	27.5	24.5	25.5	27.5	24.0	25.5	25.5	24.0	24.5	23.0	19.0	20.5
19	27.0	24.0	25.0	27.5	23.5	25.0	27.0	23.5	25.0	23.5	19.0	21.0
20	26.5	22.5	24.0	28.5	25.0	26.5	26.5	22.5	24.5	24.5	20.5	22.0
21	33.5	21.0	24.5	28.5	26.0	27.0	24.5	21.5	23.0	24.0	21.0	22.5
22	28.0	22.5	25.0	27.5	25.5	26.5	26.0	23.0	24.0	24.0	22.0	23.0
23	---	---	---	26.0	24.5	25.0	25.0	21.5	23.0	24.5	21.0	22.5
24	---	---	---	26.0	24.0	24.5	24.0	21.0	22.5	26.0	21.5	23.0
25	---	---	---	26.0	23.5	24.0	23.5	22.0	22.5	25.0	21.5	22.5
26	---	---	---	27.0	24.0	25.0	25.0	22.5	23.5	23.0	21.0	21.5
27	---	---	---	26.5	24.0	25.5	26.5	23.0	24.0	23.5	21.5	22.5
28	29.5	26.5	27.5	24.5	23.5	24.0	26.5	23.0	24.5	23.0	19.0	20.5
29	29.0	27.0	27.5	25.5	24.0	24.5	27.0	23.0	24.5	21.5	18.0	19.5
30	27.0	27.0	27.0	28.5	24.5	25.5	26.5	23.5	25.0	23.5	18.5	20.5
31	---	---	---	29.0	25.5	26.5	26.0	23.0	24.5	---	---	---
MONTH	33.5	19.0	25.0	29.0	23.5	25.5	29.0	21.0	25.0	28.0	17.0	22.5
YEAR	33.5	.0	17.5									

02086849 ELLERBE CREEK NEAR GORMAN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFN-FCBR /100ML
84/10/26	1130	WATER	0	.91	9	450	6.90	24.0		2.2	110
84/11/13	1100	WATER	0	.84	5	329	6.90	9.0	7.8	6.6	110000
84/12/10	1130	WATER	0	.91	9	265	7.10	6.0		9.5	10K
85/01/22	1140	WATER	0	.94	9	211		1.0		11.1	10K
85/02/12	1140	WATER	0	2.74	322	55	6.90	5.0	150.0	10.8	180
85/03/19	1030	WATER	0	.95	10	332	7.20	9.0		7.3	10
85/04/11	1013	WATER	0	.93	7	350	7.30	13.0		6.8	20
85/05/16	1130	WATER	0	1.75	86	112	6.90	22.0	75.0	7.0	12000
85/06/20	1000	WATER	0	.89	7	453	6.90	23.0		5.2	110
85/07/17	1040	WATER	0	.94	11	260	7.00	25.0		4.4	8900
85/08/26	1125	WATER	0.1	1.34	41	145	7.00	23.0	50.0	7.4	680
85/09/20	1100	WATER	0.1	.85	5	430	7.00	21.0		5.2	420

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/26	1130	WATER	0	161	6	340	.91	13.000	14.000	6.000	5.000
84/11/13	1100	WATER	0	76	3	320	12.00	7.000	9.100	6.200	5.500
84/12/10	1130	WATER	0	85	12	250	4.70	9.700	17.000	4.500	3.600
85/01/22	1140	WATER	0		13	280	2.80	18.000	34.000	4.000	3.000
85/02/12	1140	WATER	0	90	310	450	.41	.700	1.200	.400	.160
85/03/19	1030	WATER	0	165	11	300	1.60	17.000	32.000	5.300	4.500
85/04/11	1013	WATER	0	163	9	310	.62	13.000	14.000	5.300	4.300
85/05/16	1130	WATER	0	31	230	370	1.20	.700	1.400	.730	.420
85/06/20	1000	WATER	0	54	14	400	4.60	9.400	9.800	.350	.200
85/07/17	1040	WATER	0	59	39	220	5.10	5.100	.880	.410	.610
85/08/26	1125	WATER	0.1	32	39	200	2.40	.570	2.900	.840	.700
85/09/20	1100	WATER	0.1	68	5	330	12.00	6.500	9.000	6.000	4.800

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/13	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/02/12	1140	WATER	0	10K	20K	50K	20K	100K	.2K	100K	60
85/05/16	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	40
85/08/26	1125	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	30

K Less than noted value.

0208700780 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC
(Formerly published as Little Lick Creek at Secondary Road 1814 near Oak Grove)

LOCATION.--Lat 35°59'11", long 78°47'58", Durham County, Hydrologic Unit 03020201, on right bank 300 ft upstream from bridge on Secondary Road 1814, and 1.3 mi northeast of Oak Grove.

DRAINAGE AREA.--10.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 265 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good above 1 ft³/s and fair below except those for periods April 23-30, July 16-24, September 21-24 which are poor due to beaver dams below gage. Slight diurnal fluctuation at low flow. An average of 30.4 ft³/s was diverted from Flat River for Durham municipal water supply, of which an average of 0.5 ft³/s was returned as sewage effluent upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s Mar. 18, 1983, gage height, 8.43 ft; no flow parts of several days during Aug. and Sept., 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0900	*466	*6.84	No other peak greater than base discharge.			

Minimum discharge, 0.04 ft³/s Oct. 25, 27, 28, 29; minimum gage height, 1.39 ft, Oct. 25, June 24, 25, 27, 28, 29, 30, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	.68	1.5	.92	271	7.0	2.3	.67	.74	1.5	4.8	.47
2	1.3	.59	1.1	2.1	199	6.0	2.0	.76	.63	.85	6.7	.51
3	.50	.56	37	173	36	4.9	2.0	41	.52	.49	.86	.43
4	.40	.54	3.5	119	13	4.3	1.8	4.7	.55	.45	.59	.42
5	.42	.54	30	32	23	4.3	1.7	2.2	.56	.40	.55	.42
6	.46	.56	41	8.6	46	3.6	1.6	1.9	.52	.44	.53	.40
7	.44	.53	4.8	5.5	25	3.3	1.3	2.0	.51	.63	.53	.45
8	.44	.54	3.0	4.1	8.9	3.5	1.2	1.1	.53	.45	.52	.41
9	.46	.61	2.2	3.1	5.8	3.3	1.1	.85	.49	.56	.53	.36
10	.43	.71	1.9	2.7	5.0	2.8	1.0	1.0	.45	.75	.55	.39
11	.46	1.7	1.8	2.7	4.6	2.6	1.0	.98	.43	.53	.51	.36
12	.46	1.1	1.6	2.4	117	2.8	1.5	1.5	.52	.58	.58	.34
13	.50	.53	1.4	2.1	22	2.5	1.3	1.6	.71	1.2	.63	.33
14	.54	.42	1.7	2.1	8.9	2.3	1.4	1.4	.45	9.6	.66	.34
15	.49	.39	1.4	2.0	6.3	2.1	1.3	1.2	.49	1.1	.58	.34
16	.43	.38	1.2	1.7	5.0	2.1	1.1	5.4	.46	.63	.66	.32
17	.48	.47	1.1	2.8	3.9	2.3	1.2	2.2	.42	.92	.92	.31
18	.48	.46	1.0	3.7	3.3	1.9	1.0	2.0	.71	.71	36	.31
19	.48	.46	1.0	3.0	3.3	1.5	1.0	1.3	.89	.71	19	.33
20	.40	.41	1.1	2.5	3.4	1.7	.89	1.2	.47	.69	1.5	.35
21	.29	.44	1.2	1.8	2.9	1.6	1.1	1.3	.40	.69	7.2	.40
22	.28	.48	1.4	1.5	2.8	3.1	1.0	4.3	.46	1.5	1.9	.43
23	.24	.49	1.4	1.6	2.8	4.7	.96	64	.43	.78	.93	.30
24	.22	.49	1.2	1.8	2.7	7.8	.92	6.5	.38	.47	.69	.31
25	.22	.44	.92	1.9	2.8	21	.93	3.3	.39	18	24	.41
26	.22	.43	.80	1.9	113	7.3	.85	2.0	.38	5.3	5.4	.68
27	.25	.46	.88	1.5	23	4.8	.80	1.5	.39	1.4	1.9	.63
28	.23	1.1	.96	2.0	9.8	3.7	.69	1.0	.39	2.2	1.2	.64
29	.21	2.9	1.0	2.9	---	3.3	.54	.99	.44	1.4	.78	.82
30	2.9	1.8	.95	3.4	---	2.9	.46	.82	.44	.84	.59	.97
31	2.3	---	.93	32	---	2.6	---	.75	---	.63	.56	---
TOTAL	33.93	21.21	150.94	428.32	970.2	127.6	35.94	161.42	15.15	56.40	122.35	13.18
MEAN	1.09	.71	4.87	13.8	34.6	4.12	1.20	5.21	.50	1.82	3.95	.44
MAX	17	2.9	41	173	271	21	2.3	64	.89	18	36	.97
MIN	.21	.38	.80	.92	2.7	1.5	.46	.67	.38	.40	.51	.30
CFSM	.11	.07	.48	1.37	3.43	.41	.12	.52	.05	.18	.39	.04
IN.	.12	.08	.56	1.58	3.57	.47	.13	.59	.06	.21	.45	.05

CAL YR 1984 TOTAL 5336.72 MEAN 14.6 MAX 359 MIN .13 CFSM 1.45 IN. 19.66
WTR YR 1985 TOTAL 2136.64 MEAN 5.85 MAX 271 MIN .21 CFSM .58 IN. 7.87

02087007B0 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to September 1985.
WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the Falls Lake. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemical and biological data shown in last table were provided by the Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, $\geq$1200 microsiemens Mar. 19, Apr. 10, 1985; minimum recorded, $\leq$26 microsiemens Apr. 4, 5, 1984.
WATER TEMPERATURE: Maximum, 27.0°C Aug. 11, 1983; minimum, 0.0°C Feb. 7, 8, 9, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, $\geq$1200 microsiemens Mar. 19, Apr. 10; minimum, 61 microsiemens Feb. 1.
WATER TEMPERATURE: Maximum, 26.5°C June 10, 18, 25; minimum, 0.5°C Feb. 9, 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
23...	1500	.22	500	6.5	21.5	20	759	2.3	26	30	290
DEC											
04...	1520	3.0	168	6.6	7.5	140	763	9.4	78	--	--
19...	0805	.73	310	6.5	11.0	20	756	6.8	62	K4	K44
JAN											
03...	0900	200	100	6.4	9.0	200	760	9.9	86	--	--
FEB											
20...	1645	3.3	189	6.6	8.0	30	763	11.4	96	<4	<4
MAR											
26...	0825	7.5	148	5.7	7.0	80	765	10.2	84	--	--
APR											
30...	1430	.48	419	7.1	18.0	30	759	5.2	55	92	120
MAY											
23...	0745	68	85	6.2	19.0	500	750	7.1	78	--	--
JUN											
18...	0815	.26	455	6.5	22.0	30	749	3.5	41	--	--
JUL											
22...	1515	.96	194	6.5	25.0	35	761	4.2	51	--	--
AUG											
19...	1615	4.1	135	6.1	24.0	200	753	6.8	82	--	--
SEP											
24...	1130	.09	500	6.4	19.5	20	754	--	--	--	260

K Results based on colony count outside the acceptable range (non-ideal colony count).

02087000780 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
23...	59	0	15	5.3	66	67	4	8.5	51	44	.90
DEC											
04...	41	10	10	3.9	15	42	1	3.8	19	15	.20
19...	60	9	15	5.5	35	53	2	5.2	27	28	.30
JAN											
03...	24	1	6.0	2.2	7.7	38	.7	2.9	12	10	.10
FEB											
20...	48	10	12	4.3	17	43	1	1.2	19	16	.10
MAR											
26...	43	8	11	3.8	13	38	.9	1.9	15	15	.10
APR											
30...	75	20	19	6.8	47	55	2	6.7	32	38	.60
MAY											
23...	23	8	5.9	1.9	6.4	34	.6	3.1	9.4	6.4	.10
JUN											
18...	66	18	17	5.8	56	62	3	7.2	38	46	.60
JUL											
22...	39	0	10	3.5	18	46	1	5.0	23	16	.40
AUG											
19...	34	5	9.0	2.9	12	43	.9	.30	15	9.6	.20
SEP											
24...	62	28	16	5.3	70	67	4	10	50	47	.80

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT											
23...	18	322	250	.44	.19	10	.560	11	--	3.00	--
DEC											
04...	9.7	--	95	.13	.77	1.9	.030	1.9	--	.050	--
19...	16	197	170	.27	.39	5.5	.120	5.6	--	.720	.670
JAN											
03...	7.4	100	62	.14	54	.44	.060	.50	--	.110	--
FEB											
20...	12	125	100	.17	1.1	1.7	.050	1.7	--	.300	--
MAR											
26...	10	110	91	.15	2.2	.57	.030	.60	--	.100	--
APR											
30...	15	265	200	.36	.34	10	.630	11	--	.720	--
MAY											
23...	6.7	65	49	.09	12	.50	.100	.60	.52	.350	.160
JUN											
18...	19	314	220	.43	.22	12	.560	13	--	.860	--
JUL											
22...	8.9	122	110	.17	.32	1.1	.110	1.2	--	.400	--
AUG											
19...	9.5	105	77	.14	1.2	.70	.100	.80	.75	.250	.190
SEP											
24...	17	320	240	.44	.08	8.6	.590	9.2	--	2.10	--

0208700780 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT										
23...	--	1.3	--	4.3	--	--	15	68	--	6.80
DEC										
04...	--	.45	--	.50	--	--	2.4	11	--	.810
19...	.86	.58	--	1.3	--	--	6.9	31	--	2.70
JAN										
03...	--	.89	--	1.0	--	--	1.5	6.6	--	.280
FEB										
20...	--	1.2	--	1.5	--	--	3.2	14	--	.460
MAR										
26...	--	.60	--	.70	--	--	1.3	5.8	--	.310
APR										
30...	--	1.1	--	1.8	--	--	13	57	--	3.70
MAY										
23...	.21	.65	--	1.0	--	--	1.6	7.1	--	.280
JUN										
18...	--	1.0	--	1.9	--	--	15	66	--	4.70
JUL										
22...	--	1.1	--	1.5	--	--	2.7	12	--	1.20
AUG										
19...	.24	1.4	1.4	1.6	.00	1.6	2.4	11	2.4	.550
SEP										
24...	--	.80	--	2.9	--	--	12	54	--	7.40

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT										
23...	--	6.70	--	--	1	<1	20	9	390	1
DEC										
04...	--	.720	--	--	1	<1	10	6	2100	8
19...	2.50	2.30	2.40	7.4	1	<1	10	6	800	1
JAN										
03...	--	.200	--	--	1	<1	20	20	14000	30
FEB										
20...	--	.450	--	--	<1	<1	10	9	900	3
MAR										
26...	--	.220	--	--	1	<1	10	5	1400	2
APR										
30...	--	3.30	--	--	1	<1	20	15	560	2
MAY										
23...	.100	.210	.120	.37	<1	1	10	16	10000	25
JUN										
18...	--	4.40	--	--	<1	<1	10	11	410	3
JUL										
22...	--	1.10	--	--	2	2	10	13	4900	18
AUG										
19...	.440	.450	.400	1.2	1	<1	10	10	3800	5
SEP										
24...	--	7.60	--	--	2	2	10	8	310	6

02087007B0 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT								
23...	100	<.1	<1	60	8.9	--	7	.00
DEC								
04...	80	.1	<1	30	12	--	29	.23
19...	90	.3	<1	20	8.3	.12	11	.02
JAN								
03...	600	<.1	<1	80	17	--	730	394
FEB								
20...	120	<.1	<1	20	6.7	--	8	.07
MAR								
26...	80	<.1	<1	<10	11	--	25	.51
APR								
30...	110	.2	<1	90	8.4	--	13	.02
MAY								
23...	370	.1	<1	70	15	.04	378	69
JUN								
18...	90	.1	<1	50	12	--	14	.00
JUL								
22...	190	.1	<1	170	18	--	163	.42
AUG								
19...	100	<.1	<1	60	10	.06	92	1.0
SEP								
24...	60	<.1	<1	70	9.2	--	8	.00

NEUSE RIVER BASIN

02087000780 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	499	88	153	256	155	189	332	276	297	376	344	360
2	227	166	193	335	240	290	365	265	347	375	227	352
3	329	250	280	372	316	348	356	82	126	172	78	108
4	389	334	350	422	371	396	171	147	159	198	79	110
5	423	385	402	459	426	438	212	95	172	312	117	177
6	461	430	441	458	409	438	151	98	117	152	126	136
7	495	459	470	398	359	374	207	156	181	170	144	155
8	504	464	493	449	389	431	228	175	206	184	160	170
9	504	481	495	465	442	452	259	214	238	199	177	189
10	497	485	490	446	403	426	265	230	254	212	190	204
11	488	477	483	421	247	350	276	226	258	218	193	209
12	485	479	481	244	223	229	290	229	272	259	211	228
13	495	483	490	326	231	285	296	262	282	260	223	245
14	509	468	499	362	329	347	286	231	258	259	218	245
15	520	508	513	414	367	385	299	246	265	251	226	245
16	517	470	507	451	420	431	339	299	318	272	249	261
17	507	500	504	471	442	456	344	313	330	275	211	251
18	502	496	499	473	448	461	333	306	321	216	204	209
19	507	472	500	489	472	486	328	307	318	251	214	228
20	509	502	506	492	485	490	330	309	318	255	221	240
21	514	491	505	492	479	486	322	292	310	297	256	268
22	511	474	505	482	452	466	326	302	313	684	266	432
23	513	504	509	480	454	468	337	293	320	443	343	375
24	505	489	497	485	459	471	355	294	332	339	316	328
25	486	473	481	492	461	480	367	330	350	316	295	309
26	483	474	478	504	460	489	355	331	344	332	298	307
27	479	473	476	502	472	482	368	338	353	339	314	332
28	478	462	467	470	436	455	369	354	363	335	278	308
29	475	457	469	310	163	193	373	351	363	534	270	365
30	491	70	413	273	207	229	386	350	367	355	313	335
31	158	64	112	---	---	---	375	356	365	327	126	244
MONTH	520	64	441	504	155	397	386	82	284	684	78	256

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	115	61	80	164	145	154	256	236	246	439	424	429
2	140	69	102	188	159	173	271	246	262	441	429	433
3	178	108	138	199	172	188	278	204	266	420	119	184
4	135	115	124	204	183	193	282	256	273	207	150	177
5	154	121	133	214	186	198	295	269	282	255	205	225
6	122	109	113	224	197	212	319	278	295	293	243	262
7	122	95	112	229	208	222	332	300	313	275	250	265
8	144	122	131	239	203	221	537	304	363	301	263	281
9	167	141	154	249	199	223	1000	324	510	328	302	314
10	178	156	168	264	219	244	≥1200	328	≥730	343	321	331
11	177	152	165	265	230	251	627	328	424	348	324	336
12	174	68	90	265	224	245	496	304	339	372	319	351
13	118	90	103	262	231	252	365	334	341	332	296	314
14	139	118	126	264	241	257	369	328	350	362	334	343
15	153	135	143	273	194	263	359	322	343	367	351	357
16	174	138	155	306	259	281	344	320	334	385	175	246
17	189	163	176	304	253	281	349	319	337	272	222	244
18	195	174	186	293	261	281	360	341	348	300	251	271
19	198	179	191	≥1200	264	≥520	360	345	352	355	303	334
20	201	180	191	300	263	282	367	275	352	382	347	374
21	210	185	200	301	279	289	386	368	379	389	373	382
22	215	191	208	306	228	267	394	380	387	404	129	242
23	238	199	219	236	198	222	398	380	391	133	73	104
24	237	204	226	237	172	215	404	385	395	173	135	151
25	237	206	223	159	124	137	410	394	402	225	178	199
26	199	80	102	171	148	156	417	395	406	268	223	243
27	130	103	116	182	162	169	420	406	414	324	260	286
28	151	129	137	192	142	182	438	415	423	334	306	324
29	---	---	---	211	190	199	428	418	425	358	325	340
30	---	---	---	238	209	221	436	410	418	367	341	351
31	---	---	---	250	223	238	---	---	---	392	357	374
MONTH	238	61	150	≥1200	124	≥233	≥1200	204	≥370	441	73	292

0208700780 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	404	374	385	478	195	400	406	80	337	436	409	422
2	441	409	424	499	238	378	231	98	148	425	404	417
3	449	415	434	369	276	321	381	235	291	458	430	448
4	455	423	439	423	375	399	418	385	398	440	425	434
5	439	421	430	454	423	434	440	415	427	431	403	422
6	430	414	423	457	442	448	429	420	424	442	414	430
7	434	406	420	463	426	444	422	413	419	451	413	435
8	442	415	428	419	375	386	425	405	417	490	451	472
9	484	437	457	428	395	412	420	407	413	474	466	472
10	474	458	466	443	334	409	437	420	430	466	451	458
11	467	443	451	442	365	420	484	441	466	456	444	449
12	452	393	430	452	440	445	468	451	462	466	448	452
13	434	333	398	466	434	453	463	447	458	469	452	462
14	417	338	376	441	68	154	453	435	447	488	463	473
15	453	417	435	307	197	241	441	432	439	532	490	505
16	478	449	464	365	311	338	442	432	436	537	519	529
17	470	457	462	373	268	333	455	428	444	532	503	517
18	459	428	450	436	362	399	444	64	179	519	494	508
19	444	282	320	451	411	430	178	84	124	512	492	504
20	404	322	363	464	426	447	272	181	216	509	488	499
21	440	406	420	492	459	473	313	135	168	501	480	491
22	456	439	446	473	166	224	264	178	208	522	486	497
23	485	454	465	380	216	290	340	273	301	525	489	505
24	483	467	473	391	286	345	392	341	357	510	484	502
25	471	457	462	427	90	215	403	101	236	495	489	493
26	465	451	457	228	123	173	213	128	161	502	473	488
27	461	447	454	326	233	260	269	201	236	484	475	480
28	461	451	456	342	182	252	303	255	287	---	---	---
29	463	457	460	305	227	258	329	282	312	---	---	---
30	478	458	465	367	312	337	367	331	349	---	---	---
31	---	---	---	384	368	374	403	366	380	---	---	---
MONTH	485	282	434	499	68	351	484	64	335	537	403	473
YEAR	≥1200	61	≥334									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.0	15.0	16.0	19.0	17.5	18.0	8.5	7.0	8.0	13.5	11.5	12.5
2	15.5	13.5	14.5	20.0	17.0	18.5	8.5	7.0	8.0	15.0	13.0	14.0
3	14.5	12.0	13.5	18.0	14.0	15.0	8.5	6.0	7.0	12.5	7.0	9.0
4	16.0	13.0	14.5	15.5	13.5	14.5	8.5	6.0	7.5	8.0	7.0	7.0
5	17.0	15.0	16.0	17.0	15.0	16.0	8.0	6.0	7.0	7.5	6.0	7.0
6	18.0	16.5	17.0	16.5	14.0	15.5	6.5	5.5	6.0	6.0	4.5	5.5
7	18.5	16.5	17.5	14.0	11.5	13.0	6.0	4.0	5.0	6.5	4.0	5.0
8	18.5	16.5	17.5	11.5	9.5	11.0	5.0	2.5	4.0	6.0	4.0	5.5
9	18.0	16.5	17.0	12.0	10.0	11.5	5.5	3.5	4.5	5.5	4.0	5.0
10	18.5	16.5	17.5	12.5	9.0	11.5	7.5	5.0	6.5	4.5	3.5	4.0
11	18.5	16.5	17.5	15.0	12.0	13.5	9.0	7.0	8.0	6.0	4.0	5.0
12	17.5	16.0	17.0	12.0	11.5	11.5	9.0	7.5	8.0	5.0	4.0	4.5
13	17.5	15.0	16.0	10.5	9.0	10.0	10.0	7.5	9.0	5.5	3.5	4.5
14	16.5	14.5	16.0	10.0	8.5	9.5	11.0	9.0	10.0	4.5	4.0	4.5
15	17.0	14.5	16.0	10.5	8.5	9.5	11.5	9.5	10.5	4.5	4.0	4.5
16	18.0	16.0	17.0	12.5	10.5	11.5	12.0	10.5	11.0	5.0	3.0	4.0
17	19.0	17.0	18.0	11.5	9.5	10.5	12.5	11.0	11.5	5.0	3.5	4.5
18	19.5	17.5	18.0	10.5	8.5	9.5	12.5	9.5	11.0	4.5	2.5	3.5
19	20.5	17.5	19.0	10.5	10.5	10.5	13.0	11.0	12.0	6.5	4.5	5.0
20	20.0	18.5	19.0	10.5	9.0	9.5	13.0	12.0	12.5	5.5	2.5	4.0
21	22.0	18.5	19.5	9.0	7.5	8.5	14.0	12.0	13.0	2.5	1.5	2.0
22	22.5	14.0	20.0	8.5	6.5	7.5	14.0	12.0	13.0	4.0	1.5	3.0
23	22.5	19.5	20.5	8.0	6.5	7.5	12.0	9.0	10.5	4.5	3.0	3.5
24	23.0	13.0	19.5	8.0	6.5	8.0	9.5	7.5	9.0	4.5	3.5	4.0
25	21.0	16.0	20.0	8.5	7.0	8.0	11.5	9.0	10.5	4.5	3.5	4.0
26	20.5	18.5	19.5	9.5	8.0	8.5	13.0	6.5	8.5	4.0	2.0	3.0
27	19.5	18.0	19.0	11.5	8.5	10.0	11.0	9.0	10.0	5.0	2.5	4.0
28	21.5	18.5	20.0	14.0	11.5	12.5	11.5	9.0	10.5	5.0	3.5	4.0
29	22.5	20.5	21.5	10.0	8.0	9.0	12.5	6.5	10.5	4.0	2.5	3.0
30	21.0	18.5	20.5	8.0	6.0	7.5	13.5	11.5	12.5	3.5	2.0	2.5
31	20.0	18.5	19.0	---	---	---	13.0	7.0	12.0	5.0	1.5	3.0
MONTH	23.0	12.0	18.0	20.0	6.0	11.0	14.0	2.5	9.5	15.0	1.5	5.0

NEUSE RIVER BASIN

02087007B0 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NEAR OAK GROVE, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	5.0	6.0	9.5	7.5	8.5	17.5	14.5	16.0	19.0	14.5	16.5
2	6.5	6.0	6.5	12.0	8.5	10.0	15.0	12.0	13.5	18.0	16.5	17.5
3	6.5	4.5	6.0	12.0	9.0	10.5	14.0	10.0	12.5	17.5	15.0	16.5
4	6.5	4.0	4.5	12.5	10.5	11.5	16.5	11.5	14.0	15.5	13.0	14.5
5	4.0	2.5	3.5	15.0	12.5	13.5	17.5	14.0	16.0	16.0	13.0	14.5
6	6.0	3.5	4.5	12.5	10.0	11.5	18.0	15.5	16.5	17.5	14.5	16.0
7	6.0	4.5	5.0	11.5	7.5	9.5	17.5	13.5	15.0	18.5	16.5	17.5
8	4.5	2.0	3.0	13.5	8.5	11.0	15.0	12.5	13.5	17.5	16.5	17.0
9	3.5	.5	2.0	13.5	11.5	12.5	14.0	10.5	12.0	17.0	15.5	16.5
10	4.5	.5	2.5	13.0	9.5	11.0	13.0	8.5	11.0	18.5	16.5	17.5
11	5.5	1.5	3.5	10.5	9.0	10.0	14.5	9.5	12.0	19.0	17.5	18.0
12	6.0	4.0	5.0	14.0	10.0	12.0	16.5	12.0	14.0	19.0	17.5	18.0
13	4.5	2.5	4.0	13.5	9.5	12.0	17.5	14.0	15.5	20.5	17.5	18.5
14	4.5	3.0	4.0	13.5	11.0	12.0	16.0	14.5	15.5	22.0	18.0	20.0
15	5.0	3.0	4.0	14.0	11.0	12.5	17.5	15.0	16.0	21.0	19.0	20.0
16	5.0	2.0	3.5	12.5	9.0	10.5	18.0	15.5	17.0	20.0	18.5	19.0
17	6.0	2.5	4.0	12.5	10.5	11.5	18.0	15.0	16.5	19.0	17.5	18.5
18	6.5	3.5	5.0	11.5	9.0	10.0	17.5	14.0	16.0	18.5	17.0	17.5
19	7.0	5.0	6.0	11.0	7.0	9.0	19.0	15.0	17.0	19.0	16.0	17.5
20	8.0	6.5	7.0	12.5	7.5	10.0	19.5	15.5	17.5	19.5	16.5	18.0
21	8.0	5.0	7.0	11.0	9.5	10.0	20.0	16.0	18.0	21.5	18.5	19.5
22	9.5	4.0	8.0	9.5	7.0	8.5	19.5	16.0	18.0	20.5	18.0	19.5
23	11.0	8.0	9.5	10.0	7.0	8.5	19.0	16.0	17.5	20.5	19.0	19.5
24	14.0	10.0	12.0	10.5	9.0	9.5	19.0	16.5	17.5	20.0	17.5	18.5
25	14.5	13.0	13.5	10.0	8.5	9.0	19.5	17.0	18.0	18.0	16.0	17.5
26	13.5	11.0	12.0	11.5	7.0	9.5	19.0	15.0	17.0	18.5	16.5	17.5
27	13.0	11.0	12.0	13.5	8.5	11.0	18.0	16.0	17.0	19.5	17.0	18.5
28	11.5	8.5	10.0	16.5	11.0	13.5	19.5	17.0	18.0	20.5	17.5	19.0
29	---	---	---	18.0	14.0	16.0	19.0	17.0	17.5	20.0	18.0	19.0
30	---	---	---	19.5	16.5	17.5	18.0	14.0	16.0	20.0	18.0	18.5
31	---	---	---	17.5	15.5	16.5	---	---	---	21.0	18.0	19.0
MONTH	14.5	.5	6.0	19.5	7.0	11.0	20.0	8.5	15.5	22.0	13.0	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	19.5	21.0	20.0	18.5	19.5	25.5	24.0	24.5	23.5	22.0	23.0
2	23.5	19.0	20.5	23.0	18.5	20.0	24.5	23.0	23.5	24.0	22.0	23.0
3	24.5	19.5	21.0	24.0	18.5	21.0	23.0	21.0	22.0	24.5	22.5	23.5
4	24.5	17.5	21.5	24.5	19.5	22.0	23.0	20.0	22.0	25.5	23.5	24.0
5	26.0	21.0	23.0	24.5	20.5	22.5	23.5	20.5	22.0	25.5	23.5	24.5
6	24.5	21.0	22.5	24.0	21.0	23.0	24.0	22.0	23.0	25.5	23.5	24.5
7	22.5	19.5	21.0	24.0	21.0	23.0	25.0	23.0	24.0	25.5	24.0	24.5
8	24.5	20.0	21.5	25.0	19.5	22.5	25.0	24.0	24.5	25.5	24.0	24.5
9	25.5	20.5	22.5	23.5	20.5	22.5	25.0	23.5	24.0	25.5	24.0	25.0
10	26.5	21.0	23.5	24.0	20.0	22.5	25.0	24.0	24.5	26.0	24.5	25.0
11	26.0	22.0	24.0	24.0	21.5	23.0	25.0	23.0	24.0	25.5	24.0	24.5
12	25.5	22.5	24.0	24.0	22.5	23.0	25.5	23.5	24.5	24.0	22.0	23.0
13	24.0	19.5	21.0	24.0	22.0	23.0	25.5	23.5	24.5	21.5	19.0	20.5
14	21.5	17.5	19.0	23.0	21.5	22.5	26.0	24.0	25.0	18.5	17.0	18.0
15	21.0	18.0	19.5	24.0	22.0	23.0	25.5	23.5	24.5	18.5	16.5	17.5
16	23.0	20.5	21.0	24.5	23.0	23.5	25.5	23.5	24.0	19.0	17.0	18.0
17	26.0	20.5	22.5	23.5	22.5	23.0	24.0	23.5	23.5	19.0	17.0	18.0
18	26.5	22.0	23.5	24.0	22.0	23.0	24.5	23.0	23.5	19.5	17.5	18.5
19	26.0	21.5	23.5	23.5	21.5	22.5	24.0	23.0	23.5	19.5	17.5	18.5
20	25.5	20.5	22.5	24.5	22.5	23.5	24.0	22.5	23.5	20.5	18.5	19.5
21	24.0	19.0	21.0	25.5	23.5	24.0	23.5	22.5	23.0	21.0	19.0	20.0
22	24.5	19.5	21.0	25.0	23.5	24.5	23.5	22.5	23.0	21.0	20.5	20.5
23	25.0	20.0	22.0	24.0	23.0	23.5	23.0	21.0	22.0	21.0	20.0	20.5
24	26.0	20.5	23.0	23.5	22.5	23.0	22.5	20.5	21.5	21.5	19.5	20.5
25	26.5	22.5	24.0	23.0	22.0	22.5	22.5	21.5	22.0	21.0	19.5	20.0
26	25.5	21.0	23.0	24.5	23.0	23.5	23.5	22.0	22.5	20.0	18.5	19.5
27	24.0	19.0	20.5	24.0	23.5	23.5	23.5	22.5	23.0	20.5	19.5	20.0
28	22.5	18.0	19.5	23.5	22.5	23.0	23.5	22.0	23.0	---	---	---
29	21.5	19.0	20.0	23.5	22.5	23.0	24.0	22.0	23.0	---	---	---
30	21.5	19.5	20.0	24.5	23.0	23.5	24.5	23.0	23.5	---	---	---
31	---	---	---	25.5	23.5	24.5	24.0	22.5	23.5	---	---	---
MONTH	26.5	17.5	22.0	25.5	18.5	23.0	26.0	20.0	23.5	26.0	16.5	21.5
YEAR	26.5	.5	15.5									

02087007B0 LITTLE LICK CREEK ABOVE SECONDARY ROAD 1814 NR OAK GROVE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/26	1200	WATER	0	1.45	.3	410	6.60	23.0		4.2	170
84/11/13	1130	WATER	0	1.48	.7	203	7.00	10.0	31.0	7.6	260
84/12/10	1200	WATER	0	1.62	2	132	7.40	6.0		10.6	10K
85/01/22	1215	WATER	0	1.58	2	220		3.0		10.2	20
85/02/12	1215	WATER	0	5.65	194	40	7.00	5.0	130.0	10.8	2300
85/03/19	1100	WATER	0	1.57	2	200	7.00	9.0		10.0	10
85/04/11	1050	WATER	0	1.55	1	253	7.10	13.0		9.4	10K
85/05/16	1200	WATER	0	1.94	10	140	6.90	21.0	80.0	6.2	13000
85/06/20	1025	WATER	0	1.41	.3	312	6.80	23.0		4.6	100
85/07/17	1110	WATER	0	1.57	.6	297	7.00	25.0		5.6	280
85/08/26	1155	WATER	0.1	1.71	3	155	7.00	23.0	110.0	7.2	1300
85/09/20	1150	WATER	0.1	1.47	.2	425	6.80	19.0		6.4	120

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/26	1200	WATER	0	44	1K	340	21.00	1.100	2.600	7.600	6.900
84/11/13	1130	WATER	0	45	10	250	8.90	.130	.900	3.000	2.800
84/12/10	1200	WATER	0	39	10	190	4.00	.120	.600	1.100	.940
85/01/22	1215	WATER	0		7	270	5.80	.480	1.100	1.500	1.400
85/02/12	1215	WATER	0	55	99	280	.27	.050	.800	.220	.080
85/03/19	1100	WATER	0	66	6	230	7.00	.220	1.100	1.700	1.500
85/04/11	1050	WATER	0	73	6	300	8.80	.490	5.600	2.400	2.000
85/05/16	1200	WATER	0	44	380	510	.65	.370	1.200	.570	.210
85/06/20	1025	WATER	0	58	14	290	8.40	.550	1.500	3.600	2.900
85/07/17	1110	WATER	0	63	39	280	4.70	.950	2.400	3.200	2.500
85/08/26	1155	WATER	0.1	45	51	260	.65	.150	.800	.770	.600
85/09/20	1150	WATER	0.1	43	13	360	16.00	.730	3.000	6.600	6.300

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/13	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20
85/02/12	1215	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/05/16	1200	WATER	0	10K	20K	50K	20	100K	.2K	100K	30
85/08/26	1155	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

NEUSE RIVER BASIN

02087O5200 SMITH CREEK AT GRISSOM, NC

LOCATION.--Lat 36°03'19", long 78°36'08", Granville County, Hydrologic Unit 03020201, on right bank 5 ft upstream of bridge on Secondary Road 1710, 1.2 mi north of Grissom, and 4.4 mi upstream of the mouth.

DRAINAGE AREA.--6.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1984 to December 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR CURRENT PERIOD.--February to September 1984: Maximum discharge during period, 427 ft³/s Feb. 23, gage height, 5.63 ft; minimum, 0.31 ft³/s Sept. 3, 4, 7, 8, 9, gage height, 0.87 ft.

Water year 1985: Maximum discharge, 482 ft³/s Feb. 1, 1985, gage height, 6.08 ft; minimum, 0.16 ft³/s Sept. 21, minimum gage height, 0.74 ft Sept. 14.

October to December 1985: Maximum discharge during the period, 371 ft³/s Nov. 21, gage height, 5.16 ft; minimum, 0.16 ft³/s Oct. 16, minimum gage height, 0.77 ft Oct. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR FEBRUARY TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					e7.8	11	14	5.6	13	2.0	3.2	.50
2					e7.8	9.1	12	5.2	9.1	1.4	2.7	.41
3					8.1	8.9	11	5.5	7.4	2.9	2.1	.37
4					12	9.4	54	5.0	6.4	1.3	1.6	.45
5					13	38	77	4.3	e5.4	1.6	1.4	.58
6					11	87	18	25	e4.8	1.7	1.2	.43
7					9.7	37	12	15	e4.2	e1.0	1.2	.38
8					10	25	9.6	19	e3.7	e.88	1.0	.34
9					11	19	9.5	18	e3.2	e.82	1.0	.38
10					15	15	13	9.5	e2.8	e.82	1.3	.96
11					21	13	11	7.3	e2.5	e.83	1.7	.74
12					18	11	9.2	6.2	e2.2	e.84	1.9	.70
13					14	26	8.5	5.1	2.0	e.83	1.5	.78
14					51	23	8.6	4.5	1.8	e1.6	1.4	1.5
15					26	15	9.8	4.0	1.7	e2.4	1.1	1.4
16					16	13	8.9	3.8	1.7	e5.0	.92	.59
17					12	10	7.8	3.7	1.9	1.5	.82	.53
18					9.6	9.3	7.1	3.6	1.6	6.8	.79	.58
19					7.7	17	6.7	3.4	1.4	6.2	.79	.63
20					6.2	13	6.7	3.0	1.3	1.9	.74	.57
21					5.2	39	6.1	2.9	1.3	2.2	.65	.48
22					4.4	18	7.3	2.7	1.2	4.6	.60	.40
23					92	12	55	3.0	1.1	5.4	.62	.43
24					39	9.4	18	3.8	1.3	3.3	.70	.38
25					16	12	13	2.8	1.5	3.2	.52	.43
26					9.7	e11	9.5	2.7	1.1	1.9	.47	.63
27					26	e7.8	8.2	4.7	.88	1.8	.47	1.1
28					37	40	7.4	4.7	1.0	21	.46	1.9
29					18	72	6.8	45	2.6	6.4	1.1	2.4
30					---	25	6.2	103	1.9	5.8	.79	3.1
31					---	17	---	24	---	3.8	.80	---
TOTAL					534.2	672.9	451.9	356.0	91.98	101.72	35.54	24.07
MEAN					18.4	21.7	15.1	11.5	3.07	3.28	1.15	.80
MAX					92	87	77	103	13	21	3.2	3.1
MIN					4.4	7.8	6.1	2.7	.88	.82	.46	.34

e Estimated

0208705200 SMITH CREEK AT GRISSOM, NC--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	1.7	2.2	2.5	144	6.8	2.6	e1.0	1.2	2.4	4.3	.82
2	1.8	1.6	2.2	4.5	94	6.0	2.5	e2.0	1.0	1.2	3.0	.74
3	1.3	1.4	15	68	26	5.3	2.6	14	.98	.86	1.1	.71
4	1.1	1.5	4.5	40	17	4.9	2.4	4.3	.85	.68	.82	.64
5	.95	1.9	13	18	17	4.8	2.3	2.7	.83	.65	.53	.63
6	.99	1.5	14	9.8	24	4.2	2.3	2.0	.84	.73	.49	.59
7	1.1	1.3	5.1	7.8	19	3.8	2.1	1.7	.92	.97	.46	.57
8	1.2	1.3	4.0	6.4	13	3.9	2.0	1.4	.93	.51	.41	.54
9	1.0	1.3	3.4	5.5	11	3.8	2.0	1.5	.83	.44	.44	.28
10	1.1	1.4	3.1	5.2	10	3.3	2.0	1.5	.70	.66	.38	.28
11	1.2	2.4	2.8	5.0	9.7	3.3	2.1	1.5	.64	5.0	.34	.27
12	1.2	1.5	2.5	4.6	32	3.3	2.1	8.8	1.4	.69	.32	.26
13	1.3	1.4	2.3	4.4	18	2.9	2.1	5.7	1.1	.46	.33	.27
14	1.6	1.5	2.2	4.2	13	2.9	2.2	3.1	.69	.44	.29	.24
15	1.8	1.6	2.1	3.7	10	2.7	2.3	2.3	.65	.48	.29	.25
16	2.0	1.6	2.1	3.4	9.3	2.5	2.2	3.2	2.2	.41	.60	.26
17	1.6	1.6	2.1	4.7	8.3	2.6	2.7	2.2	3.1	.46	1.4	.23
18	1.7	1.5	2.1	4.6	7.8	2.4	1.9	1.8	8.2	.37	6.0	.22
19	1.7	2.1	2.1	4.1	7.7	2.1	1.8	2.1	7.2	.33	3.0	.20
20	1.7	2.1	2.2	4.0	7.0	2.5	1.8	.89	2.0	.29	2.5	.21
21	1.7	1.7	2.2	3.4	6.3	2.4	1.7	1.3	1.4	.27	16	.19
22	2.7	1.7	2.4	3.5	5.9	3.8	1.6	1.7	1.3	.26	2.1	.35
23	2.1	1.7	2.2	3.5	5.5	3.6	1.5	6.6	.86	.33	1.4	.32
24	1.7	1.7	2.2	3.7	5.4	4.2	e1.4	4.1	.70	.35	1.2	.26
25	1.7	1.7	2.2	3.6	5.2	7.1	e1.3	3.4	.64	2.7	5.6	.24
26	1.6	1.7	2.2	3.2	24	4.3	e1.3	1.6	.62	2.0	3.0	.23
27	1.6	1.7	2.2	3.1	12	3.7	e1.2	1.5	.57	.77	1.8	.49
28	1.6	3.8	2.3	3.7	8.4	3.3	e1.1	1.4	.58	1.6	1.2	.30
29	1.9	3.6	2.4	4.1	---	3.2	e1.1	1.4	.62	2.2	.93	.30
30	2.1	2.4	2.4	4.1	---	3.0	e1.0	1.3	.73	1.7	.91	.32
31	2.4	---	2.4	13	---	2.8	---	1.3	---	.72	1.2	---
TOTAL	55.24	53.9	114.1	259.3	570.5	115.4	57.2	89.29	44.28	30.93	62.34	11.21
MEAN	1.78	1.80	3.68	8.36	20.4	3.72	1.91	2.88	1.48	1.00	2.01	.37
MAX	7.8	3.8	15	68	144	7.1	2.7	14	8.2	5.0	16	.82
MIN	.95	1.3	2.1	2.5	5.2	2.1	1.0	.89	.57	.26	.29	.19

WTR YR 1985 TOTAL 1463.69 MEAN 4.01 MAX 144 MIN .19

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER TO DECEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	1.5	17									
2	.45	2.3	8.4									
3	.72	2.6	5.3									
4	1.2	15	4.2									
5	.73	5.4	3.7									
6	.51	2.4	3.3									
7	.49	2.0	3.0									
8	.43	1.7	2.9									
9	.47	1.7	2.7									
10	.48	1.7	2.5									
11	.50	1.7	2.7									
12	.52	1.6	3.0									
13	.60	1.7	11									
14	.65	1.8	6.2									
15	.64	1.8	4.4									
16	.77	1.7	4.0									
17	.77	1.8	3.5									
18	.75	1.9	3.2									
19	.82	1.8	3.0									
20	.83	2.8	3.0									
21	1.2	122	2.8									
22	1.6	77	2.6									
23	1.3	18	2.8									
24	1.2	8.8	2.8									
25	1.1	5.8	2.5									
26	.96	4.5	2.2									
27	.90	3.7	2.3									
28	.97	3.1	2.4									
29	.93	6.3	2.3									
30	.95	59	2.2									
31	1.2	---	2.2									
TOTAL	24.95	363.1	124.1									
MEAN	.80	12.1	4.00									
MAX	1.6	122	17									
MIN	.31	1.5	2.2									

e Estimated

0208705200 SMITH CREEK AT GRISSOM, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1984 to April 1985 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1984 to April 1985.
WATER TEMPERATURE: February 1984 to April 1985

INSTRUMENTATION.--Water-quality monitor from February 1984 to April 1985.

REMARKS.--Station operated as part of a study of effects of land-use on the biological habitat of Piedmont streams. Interruptions in the daily record were due to malfunctions of the monitor.

EXTREMES FOR CURRENT PERIOD.--February 1984 to April 1985:
SPECIFIC CONDUCTANCE: Maximum, 110 microsiemens Sept. 19, 1984; minimum, 23 microsiemens Apr. 5, 1984.
WATER TEMPERATURE: Maximum, 26.0°C Aug. 4, 5, 6, 7, 8, 9, 15, 1984; minimum, 0.0°C Feb. 9, 1984, several days in Jan., 1985.

WATER QUALITY DATA, FEBRUARY 1984 TO APRIL 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
FEB 1984												
23...	1120	98	44	6.5	9.5	11.2	102	3.0	25	<.10	--	.050
MAR												
28...	1305	39	45	6.7	12.5	9.8	96	3.0	34	<.10	<.10	<.010
29...	0915	64	40	6.2	11.0	10.4	99	2.4	45	.10	<.10	.260
APR												
23...	0930	49	40	5.7	9.5	10.2	91	2.2	41	.10	<.10	.100
MAY												
21...	1230	3.3	69	6.7	19.0	9.7	106	3.3	58	<.10	<.10	.050
29...	1405	132	40	5.7	19.0	8.2	90	2.2	56	.40	.24	.200
JUL												
17...	1400	1.8	79	6.9	22.0	9.7	112	3.5	61	<.10	<.10	<.010
AUG												
14...	0830	2.0	75	7.0	22.5	7.8	91	2.8	64	<.10	<.10	.010
SEP												
26...	0810	.46	85	7.2	18.0	7.9	84	3.9	52	<.10	<.10	.020
OCT												
29...	0815	2.0	85	6.1	20.0	7.7	85	3.9	71	<.10	<.10	.040
NOV												
26...	1055	1.6	71	6.7	3.0	13.2	98	3.7	60	<.10	<.10	.050
DEC												
12...	0930	5.8	68	6.3	5.0	11.8	93	4.0	49	<.10	<.10	.030
JAN , 1985												
03...	1050	86	56	5.9	10.0	--	--	4.2	54	.20	.11	.200

0208705200 SMITH CREEK AT GRISSON, NC - - Continued

WATER QUALITY DATA, FEBRUARY 1984 TO APRIL 1985

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
FEB , 1984												
23...	--	.40	--	--	<.010	--	.010	--	<1	<1	7	--
MAR												
28...	<.010	.70	.60	--	<.010	--	<.010	<.010	<1	<1	13	10
29...	.050	.40	.30	.50	.070	<.010	.040	<.010	1	<1	10	10
APR												
23...	.100	.70	.70	.80	.070	.040	.020	.010	1	1	3	--
MAY												
21...	.050	.30	.10	--	.010	<.010	<.010	<.010	1	<1	4	<10
29...	.150	1.4	1.1	1.8	.240	.020	.120	<.010	1	<1	9	<10
JUL												
17...	<.010	.70	.20	--	.030	<.010	.010	<.010	5	2	<1	<10
AUG												
14...	--	.20	.20	--	.010	--	<.010	.010	1	<1	3	<10
SEP												
26...	.010	.40	.40	--	.020	<.010	<.010	<.010	1	<1	<1	<10
OCT												
29...	.050	.30	.20	--	.020	<.010	<.010	<.010	<1	1	1	<10
NOV												
26...	<.010	4.2	.30	--	<.010	<.010	.010	<.010	<1	<1	1	<10
DEC												
12...	.030	.70	.30	--	<.010	<.010	<.010	<.010	<1	1	<1	<10
JAN , 1985												
03...	.130	1.4	.70	1.6	.280	<.010	.050	<.010	1	<1	3	<10

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB , 1984												
23...	6	<1	6700	160	10	5	220	29	2	<1	30	7
MAR												
28...	2	2	2300	80	3	1	140	33	2	<1	60	6
29...	6	6	1900	87	1	1	60	30	3	2	20	20
APR												
23...	2	1	1400	130	3	2	90	43	3	<1	50	6
MAY												
21...	1	--	960	16	<1	<1	20	--	2	2	40	5
29...	9	1	8400	120	5	2	540	58	7	<1	30	9
JUL												
17...	4	3	1500	33	2	1	50	16	3	1	10	11
AUG												
14...	15	--	1300	41	2	2	20	--	<1	1	10	--
SEP												
26...	2	2	910	45	2	3	30	16	1	1	30	9
OCT												
29...	<1	--	1300	40	1	--	30	17	1	1	30	9
NOV												
26...	<1	1	730	19	2	3	20	--	<1	1	10	11
DEC												
12...	3	<1	1100	31	1	1	90	70	4	<1	<10	5
JAN , 1985												
03...	8	8	11000	490	12	1	590	170	4	2	40	14

0208705200 SMITH CREEK AT GRISSOM, NC--Continued

WATER QUALITY DATA, FEBRUARY TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)
FEB			
14...	1300	62	84
23...	1120	98	532
MAR			
02...	1540	8.6	7
06...	1115	103	209
21...	1100	44	37
21...	1215	11	19
25...	1115	14	5
28...	0924	14	4
28...	1250	36	40
28...	1305	39	38
28...	1730	34	32
29...	0915	64	64
29...	0955	59	58
29...	1450	42	30
29...	1530	42	21
30...	1200	25	6
APR			
05...	0955	55	55
23...	0930	49	97
MAY			
07...	1530	15	16
21...	1230	3.3	4
29...	1405	132	464
JUN			
12...	1500	2.4	5
22...	1350	1.4	4
JUL			
17...	1400	1.8	4
AUG			
09...	1225	1.3	2
14...	0830	2.0	3
SEP			
26...	0810	.46	1

WATER QUALITY DATA, OCTOBER 1984 TO APRIL 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)
OCT			
02...	1403	2.0	17
29...	0815	2.0	2
NOV			
26...	1055	1.6	2
DEC			
12...	0930	5.8	4
JAN			
03...	1100	86	267
03...	1600	107	194
04...	1525	60	88
FEB			
01...	0900	124	397
01...	1009	100	500
01...	1025	93	601
01...	1100	81	318
01...	1430	52	127
02...	0215	143	256
02...	0600	159	254

NEUSE RIVER BASIN

0208705200 SMITH CREEK AT GRISSOM, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, FEBRUARY TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	53	51	52	53	51	52	54	50	52
2	---	---	---	55	53	54	55	53	54	55	52	54
3	---	---	---	55	54	55	57	54	56	56	54	55
4	---	---	---	56	55	56	57	25	53	55	54	55
5	---	---	---	57	43	52	40	23	27	56	54	55
6	---	---	---	44	41	42	30	27	29	57	44	51
7	---	---	---	48	43	45	32	31	31	54	49	51
8	---	---	---	50	47	48	34	33	34	55	46	52
9	60	58	59	52	50	51	35	35	35	54	48	52
10	58	55	56	53	52	52	36	35	35	58	54	56
11	61	52	61	54	52	53	37	35	36	60	58	59
12	53	53	53	54	53	53	38	37	37	66	60	62
13	55	53	54	56	48	51	39	37	38	68	62	64
14	53	40	44	51	49	50	40	39	39	68	64	66
15	52	48	50	52	51	51	40	39	40	69	65	67
16	55	53	54	53	51	52	41	40	41	72	66	68
17	61	56	57	55	52	53	43	42	42	70	66	68
18	60	58	59	56	53	55	44	43	43	70	57	67
19	62	61	62	55	51	52	45	44	44	72	64	68
20	65	63	64	53	51	52	46	44	45	71	64	68
21	67	66	66	53	43	46	46	46	46	73	64	69
22	69	59	68	50	48	49	48	46	47	73	67	71
23	69	26	46	52	51	52	47	40	41	73	69	70
24	51	36	43	55	52	54	43	41	42	72	68	70
25	56	50	53	55	51	53	44	43	44	73	67	70
26	57	55	56	55	52	54	46	45	45	71	67	69
27	57	44	52	57	54	56	48	46	47	71	61	67
28	50	44	47	58	33	51	49	48	49	64	60	61
29	52	49	50	43	33	39	50	49	49	64	38	48
30	---	---	---	48	45	46	51	50	50	40	33	37
31	---	---	---	51	49	50	---	---	---	49	41	45
MONTH	69	26	55	58	33	51	57	23	42	73	33	60

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	53	50	51	80	73	76	79	69	73	79	72	75
2	58	54	55	79	74	77	77	72	75	79	72	76
3	61	56	58	82	70	76	78	73	76	80	73	76
4	63	60	61	74	69	70	78	75	77	83	74	77
5	65	61	64	77	71	73	81	76	79	79	75	77
6	68	63	65	80	74	76	82	76	80	81	73	77
7	67	63	66	83	75	78	84	76	80	80	73	77
8	68	64	67	83	77	80	86	75	81	80	73	77
9	69	65	68	86	76	81	87	66	82	80	73	77
10	70	66	69	85	77	80	85	78	80	80	69	74
11	71	66	69	83	75	80	82	77	79	76	70	73
12	73	69	71	84	76	80	81	75	77	76	72	73
13	75	70	72	84	77	80	77	74	75	78	74	75
14	75	72	73	82	71	79	77	72	74	77	74	75
15	76	73	74	78	73	75	80	74	76	79	74	76
16	79	74	75	78	75	76	80	75	77	79	75	77
17	76	73	75	81	75	78	80	75	77	85	77	79
18	76	72	75	81	62	69	80	75	78	109	87	101
19	78	74	76	68	60	64	80	75	77	110	92	99
20	77	75	76	75	68	71	80	74	77	93	80	85
21	78	75	76	79	74	76	80	74	77	85	77	81
22	81	74	77	81	66	73	81	74	77	84	76	80
23	81	75	78	68	63	66	81	73	77	83	77	80
24	79	75	77	74	68	71	79	75	76	83	77	80
25	81	75	77	75	67	70	79	73	76	84	77	81
26	82	76	78	77	73	74	80	73	76	85	79	81
27	81	75	78	79	68	76	80	73	76	85	81	83
28	82	73	77	61	56	58	80	73	76	82	81	81
29	76	70	74	66	61	64	80	67	74	81	78	79
30	79	75	76	70	65	66	78	71	73	78	65	76
31	---	---	---	71	68	69	78	73	75	---	---	---
MONTH	82	50	71	86	56	74	87	66	77	110	65	79
YEAR	110	23	64									

NEUSE RIVER BASIN

0208705200 SMITH CREEK AT GRISSOM, NC--Continued

TEMPERATURE, WATER (DEG. C), FEBRUARY TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	7.5	4.0	6.0	13.0	8.0	10.5	19.0	14.0	16.5
2	---	---	---	8.0	5.0	6.5	13.5	7.0	10.5	15.5	13.0	14.0
3	---	---	---	8.0	5.0	6.5	13.0	9.5	11.5	16.0	14.0	15.0
4	---	---	---	8.5	4.0	6.5	13.5	11.5	12.5	18.5	15.0	16.5
5	---	---	---	10.0	7.0	8.5	14.5	11.5	13.0	17.5	13.5	15.5
6	---	---	---	10.0	9.0	9.5	13.5	10.0	11.5	16.0	14.0	15.0
7	---	---	---	8.5	6.5	8.0	15.0	10.0	12.0	18.0	14.5	16.0
8	---	---	---	10.0	5.0	7.5	12.5	9.0	11.0	19.5	15.5	17.0
9	4.5	.0	2.0	8.5	5.0	6.5	11.5	10.0	11.0	15.5	13.0	14.5
10	5.5	2.0	4.0	7.5	3.0	5.5	10.0	9.0	9.5	16.0	12.0	14.0
11	9.0	5.5	7.0	9.0	3.5	6.5	13.5	7.0	10.0	17.0	12.0	14.5
12	10.0	6.5	8.0	9.0	4.0	6.5	14.5	8.5	11.5	18.0	14.5	16.5
13	11.0	7.5	9.5	7.5	5.5	6.5	15.0	10.5	13.0	19.0	14.5	16.5
14	11.0	9.0	10.0	11.0	5.0	8.0	17.5	13.5	15.0	19.0	16.0	17.5
15	11.0	8.0	9.5	11.5	6.0	8.5	17.5	13.5	15.0	17.5	14.0	16.0
16	10.5	7.0	9.0	13.0	7.5	10.5	17.0	14.0	15.0	16.0	12.5	14.5
17	12.0	9.0	10.0	13.5	9.5	11.0	15.0	11.5	13.5	15.0	10.5	13.0
18	12.0	8.0	10.0	13.0	8.0	10.5	14.5	10.5	12.5	16.5	12.0	14.0
19	11.5	8.0	10.0	11.5	10.0	11.0	14.0	10.0	12.0	19.5	14.0	16.5
20	13.0	10.0	11.5	13.0	9.5	11.0	16.5	10.5	13.0	21.0	16.0	18.0
21	11.0	7.5	9.0	13.0	9.5	11.5	14.0	12.5	13.0	22.0	18.0	19.5
22	10.5	6.0	8.0	13.0	8.0	10.5	12.5	9.5	11.5	22.5	18.0	20.0
23	10.0	9.0	9.5	13.0	7.5	10.0	10.5	9.0	10.0	21.5	19.0	20.0
24	12.5	9.0	10.5	13.0	6.5	10.0	11.5	8.5	10.0	21.0	17.0	19.0
25	12.0	9.0	10.5	15.0	11.0	12.5	15.5	8.0	11.5	19.0	15.5	17.5
26	10.0	6.0	8.5	14.0	11.0	12.5	17.5	11.0	14.0	22.5	17.5	20.0
27	8.5	6.5	7.0	13.5	9.5	11.5	17.5	13.0	15.5	21.0	19.5	20.0
28	9.5	7.0	8.5	14.5	11.5	12.5	16.0	14.0	15.0	22.0	19.0	20.5
29	8.5	6.0	7.0	12.0	9.5	11.0	17.0	13.5	15.0	21.0	19.0	19.5
30	---	---	---	13.5	8.0	10.5	17.5	14.5	16.0	19.0	16.0	17.0
31	---	---	---	12.5	7.5	10.0	---	---	---	16.0	14.0	15.0
MONTH	13.0	.0	8.5	15.0	3.0	9.0	17.5	7.0	12.5	22.5	10.5	16.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.0	13.0	15.0	23.0	19.0	21.0	23.0	20.0	21.5	21.5	18.0	20.0
2	18.5	14.0	16.5	23.0	19.5	21.5	24.0	22.0	23.0	21.5	18.0	19.5
3	21.0	16.0	18.5	23.0	19.0	21.0	25.5	23.0	24.0	23.0	19.5	21.0
4	21.5	18.5	19.5	23.5	19.0	21.5	26.0	23.5	24.5	22.5	20.0	21.5
5	21.5	17.5	19.0	25.0	21.0	22.5	26.0	23.0	24.5	20.0	18.5	19.5
6	23.5	19.0	21.0	23.5	21.0	22.5	26.0	23.0	24.5	19.0	16.5	18.0
7	24.0	20.5	22.0	25.0	21.5	23.0	26.0	23.0	24.5	18.0	15.0	16.5
8	24.0	20.0	22.0	23.0	19.5	21.0	26.0	23.0	24.5	17.5	14.0	16.0
9	24.0	20.0	22.0	21.0	16.5	19.0	26.0	23.5	24.5	19.0	16.0	17.5
10	24.0	19.5	21.5	22.0	18.5	20.0	24.5	23.5	24.0	20.0	18.0	19.0
11	24.0	19.5	22.0	25.0	20.0	22.0	24.5	22.5	23.5	20.0	18.5	19.0
12	24.5	21.0	22.5	25.0	22.0	23.5	24.5	22.5	23.5	22.0	19.5	20.5
13	25.0	20.5	22.5	24.0	22.0	23.0	25.0	22.5	23.5	22.0	21.0	21.5
14	25.0	21.0	23.0	23.0	21.5	22.5	25.5	22.5	24.0	24.0	21.5	22.5
15	24.0	21.0	22.5	23.5	21.0	22.0	26.0	23.0	24.0	23.5	20.0	21.5
16	23.0	21.0	21.5	23.5	22.0	22.5	25.0	21.5	23.0	20.5	16.5	18.5
17	23.5	20.0	21.5	22.5	21.5	22.0	24.5	20.5	22.5	16.5	13.5	15.0
18	25.0	20.5	22.5	22.5	21.0	21.5	24.0	21.0	22.5	15.5	13.5	14.5
19	25.0	21.0	23.0	23.0	19.0	21.5	24.5	21.5	23.0	15.5	12.5	14.0
20	24.0	21.0	22.5	23.5	20.5	22.0	23.5	18.5	21.5	16.5	12.5	14.5
21	23.5	20.5	22.0	22.5	20.5	21.5	22.0	18.0	20.0	18.0	14.5	16.0
22	22.5	18.5	20.5	21.5	20.5	21.0	22.0	18.0	20.0	19.0	16.5	18.0
23	22.0	18.0	20.0	23.5	21.0	22.0	21.5	18.5	20.5	19.0	16.0	18.0
24	21.5	19.0	20.5	24.5	21.0	22.5	23.0	20.0	21.5	19.0	17.0	18.5
25	22.5	19.0	20.5	24.0	21.5	23.0	21.5	18.5	20.0	19.5	17.5	18.5
26	22.0	17.0	19.5	24.0	22.0	23.0	20.0	16.5	18.5	19.5	18.0	19.0
27	22.0	16.0	19.0	24.0	22.0	23.0	20.5	17.0	19.0	19.0	14.5	17.0
28	22.5	18.5	20.5	22.0	20.5	21.5	21.5	19.0	20.5	15.0	14.0	14.0
29	21.0	19.0	20.0	20.5	19.0	19.5	22.0	20.0	21.0	14.0	13.5	14.0
30	22.5	19.0	20.5	20.0	19.0	19.5	24.0	20.0	22.0	16.0	14.5	15.5
31	---	---	---	20.0	19.0	19.5	23.5	20.0	22.0	---	---	---
MONTH	25.0	13.0	21.0	25.0	16.5	21.5	26.0	16.5	22.5	24.0	12.5	18.0
YEAR	26.0	.0	16.5									

0208705200 SMITH CREEK AT GRISSOM, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, OCTOBER 1984 TO APRIL 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	65	53	58	83	81	82	73	71	73	81	74	77
2	68	62	64	82	80	81	73	65	72	79	70	75
3	69	66	68	83	80	82	68	54	58	81	49	58
4	73	69	70	82	79	80	66	60	63	53	48	49
5	74	69	72	81	79	80	68	52	64	56	49	52
6	76	72	74	81	79	80	56	51	53	60	56	59
7	79	73	76	81	78	80	61	56	59	62	61	61
8	79	75	77	80	78	79	64	61	63	64	63	63
9	80	75	78	79	76	78	66	64	65	66	64	65
10	82	77	79	79	75	77	66	65	66	66	66	66
11	83	79	81	79	74	76	67	65	66	67	66	67
12	83	79	81	79	77	78	68	66	67	68	67	68
13	84	80	82	79	77	78	70	68	69	69	68	69
14	85	80	83	78	75	77	73	70	72	70	69	69
15	84	80	82	77	75	76	75	72	74	70	69	70
16	83	80	82	76	75	75	76	75	76	72	71	72
17	84	81	83	77	75	76	79	76	77	72	70	71
18	85	83	84	77	75	76	81	75	78	72	69	71
19	85	82	84	77	75	76	81	76	78	72	70	71
20	85	83	84	78	76	77	80	77	78	75	71	73
21	87	84	86	78	76	77	80	77	79	81	76	79
22	87	84	86	77	75	76	82	76	79	85	79	82
23	85	83	84	76	74	75	81	77	79	83	75	79
24	85	82	83	76	74	75	80	76	78	80	73	76
25	84	82	83	75	73	74	78	74	76	76	70	73
26	84	83	83	75	73	74	78	74	76	75	72	73
27	85	82	83	74	72	73	78	73	76	77	74	75
28	85	82	83	74	70	73	78	73	76	76	74	75
29	84	82	83	76	74	75	78	74	76	75	73	74
30	84	81	83	75	72	73	78	73	76	75	73	74
31	84	81	82	---	---	---	79	74	77	75	67	72
MONTH	87	53	79	83	70	77	82	51	72	85	48	70

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL				
1	64	40	50	62	61	61	77	72	74			
2	55	39	50	63	61	62	75	72	74			
3	58	53	56	64	63	63	75	71	74			
4	61	57	60	65	64	64	75	71	73			
5	61	59	60	66	63	65	76	73	74			
6	60	57	59	67	65	66	78	74	76			
7	59	56	58	67	66	67	79	76	77			
8	61	58	60	68	65	67	78	76	77			
9	61	60	61	69	65	67	78	74	76			
10	61	60	61	68	66	67	76	73	75			
11	61	60	61	68	67	68	75	73	74			
12	58	46	49	69	66	68	76	73	75			
13	54	50	52	70	67	68	78	75	76			
14	57	54	56	70	67	68	79	76	77			
15	58	57	58	71	67	69	79	77	78			
16	59	59	59	70	68	69	80	77	78			
17	60	59	60	69	67	68	80	77	78			
18	61	60	60	70	68	69	80	77	79			
19	61	61	61	71	68	69	82	78	80			
20	62	61	61	71	68	69	84	80	82			
21	62	61	62	71	69	70	91	82	85			
22	64	62	62	76	69	70	91	83	85			
23	64	63	64	68	66	67	92	84	86			
24	66	64	65	68	65	67	87	83	85			
25	66	62	65	66	63	65	88	83	86			
26	62	54	56	67	63	65	88	83	86			
27	59	55	57	69	65	67	88	82	86			
28	61	59	60	71	66	69	87	83	85			
29	---	---	---	77	68	71	88	83	85			
30	---	---	---	76	70	72	88	82	85			
31	---	---	---	76	72	74	---	---	---			
MONTH	66	39	59	77	61	67	92	71	79			
YEAR	92	39	72									

0208705200 SMITH CREEK AT GRISSOM, NC--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1984 TO APRIL 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	16.0	16.5	19.0	16.5	18.0	8.0	5.0	6.5	14.5	10.5	12.5
2	16.0	14.0	15.0	19.5	17.0	18.0	7.5	3.5	6.0	15.0	13.0	14.0
3	15.5	11.0	13.0	17.0	14.0	15.0	10.0	7.5	9.0	13.5	9.0	10.5
4	16.5	12.0	14.0	15.5	13.5	14.5	8.0	6.0	7.0	9.0	8.5	8.5
5	17.0	14.0	15.5	16.5	14.5	15.5	7.0	6.5	6.5	8.5	6.5	8.0
6	18.0	15.5	16.5	15.5	12.0	14.0	7.5	5.0	7.0	6.5	4.5	5.5
7	17.0	14.5	16.0	11.5	9.0	10.0	5.0	2.5	3.5	7.0	4.5	5.5
8	18.5	16.0	17.0	10.0	6.5	8.5	4.5	1.5	3.0	6.5	4.0	5.0
9	18.5	15.0	17.0	10.5	6.5	8.5	5.0	1.5	3.0	5.0	3.0	4.0
10	19.0	15.5	17.0	11.0	7.0	9.0	6.5	3.0	4.5	3.5	2.5	3.0
11	18.5	16.0	17.0	14.0	10.5	12.5	8.0	5.0	6.5	5.5	3.0	4.0
12	18.0	15.0	16.5	11.5	8.5	10.0	8.0	5.0	6.5	4.0	2.0	3.0
13	17.0	13.5	15.5	8.5	6.0	7.5	10.0	6.5	8.0	4.0	.5	2.5
14	16.0	12.5	14.5	8.5	5.0	7.0	11.0	7.5	9.0	3.5	.5	2.0
15	16.5	12.5	14.5	8.5	5.0	7.0	12.0	9.0	10.5	3.0	1.0	2.0
16	18.5	15.0	16.5	11.5	8.5	10.0	11.5	10.0	11.0	2.5	.0	1.0
17	18.5	16.5	18.0	8.5	5.0	7.0	13.5	11.5	12.0	3.0	2.0	2.5
18	19.5	18.0	18.5	7.5	4.0	6.0	13.5	10.0	11.5	5.0	2.0	3.5
19	20.0	17.0	18.5	8.5	7.5	8.0	14.5	11.5	13.0	6.0	3.5	4.5
20	21.0	18.0	19.5	7.5	5.0	7.0	13.5	12.5	13.0	3.5	.0	2.0
21	21.0	19.0	20.0	5.0	2.5	4.0	15.0	13.0	14.0	.5	.0	.0
22	21.5	19.0	20.0	5.0	2.5	3.5	15.0	12.0	14.0	.5	.0	.0
23	21.5	20.0	20.5	5.5	1.5	3.5	11.5	8.0	10.0	.5	.0	.0
24	22.0	19.0	20.5	5.5	1.5	3.5	9.5	5.5	7.5	.5	.0	.0
25	20.5	19.0	20.0	6.0	2.0	4.0	11.5	7.5	10.0	.5	.0	.5
26	20.5	18.5	19.0	6.5	3.0	5.0	8.0	4.5	6.5	1.0	.0	.5
27	20.0	16.0	18.0	9.0	4.5	6.5	11.0	8.0	9.5	1.0	.0	.5
28	22.0	18.5	20.0	12.0	9.0	10.5	11.5	7.5	9.5	1.5	1.0	1.0
29	22.5	20.0	21.0	9.0	6.5	8.0	12.5	9.0	11.0	3.0	1.0	2.0
30	20.0	18.5	19.0	7.5	4.5	6.0	13.5	10.5	12.0	4.5	2.0	3.0
31	20.0	18.5	19.0	---	---	---	12.5	11.0	12.0	5.5	3.5	4.5
MONTH	22.5	11.0	17.5	19.5	1.5	9.0	15.0	1.5	9.0	15.0	.0	3.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL				
1	6.5	5.5	6.0	10.0	6.5	8.5	20.5	14.5	17.0			
2	6.5	6.0	6.5	13.5	8.0	10.5	17.0	10.5	14.0			
3	7.0	5.0	6.0	13.0	8.0	10.5	17.0	8.5	13.0			
4	6.0	3.5	4.5	13.0	10.0	11.5	20.0	10.5	15.0			
5	4.0	3.5	4.0	17.0	12.5	14.0	21.0	14.5	18.0			
6	6.0	4.0	5.0	14.0	9.0	11.5	21.5	16.0	18.5			
7	6.5	4.5	5.5	12.0	6.0	9.0	20.0	13.0	16.0			
8	4.5	2.0	3.0	15.0	8.0	11.5	16.5	11.0	14.0			
9	4.0	.5	2.0	15.0	11.0	13.0	15.5	9.0	12.0			
10	4.5	.5	2.5	15.0	8.0	11.0	15.0	6.5	10.5			
11	5.5	1.5	3.5	11.0	8.0	9.5	17.5	9.0	13.0			
12	6.5	4.5	5.5	16.5	10.5	13.0	20.5	11.5	16.0			
13	6.5	3.5	4.5	16.0	9.0	12.5	20.5	13.5	17.0			
14	6.0	2.5	4.5	14.5	10.5	12.5	18.0	16.0	17.0			
15	6.0	2.5	4.0	15.5	10.5	12.5	19.0	16.0	17.5			
16	5.5	1.0	3.0	13.5	7.0	10.5	20.5	16.5	18.0			
17	6.5	2.5	4.5	15.0	11.0	12.5	22.0	14.5	18.0			
18	7.0	2.5	4.5	13.5	8.5	10.5	22.5	13.0	17.5			
19	8.0	5.0	6.5	12.5	5.0	8.5	25.0	15.5	20.0			
20	9.5	6.0	7.5	14.5	7.0	10.5	25.5	16.0	20.5			
21	9.0	4.0	6.0	11.5	9.0	10.5	25.5	16.0	20.5			
22	11.0	5.5	8.0	9.5	8.0	8.5	25.0	15.5	20.0			
23	12.5	7.5	10.0	12.5	8.0	10.0	25.0	16.0	20.0			
24	16.5	10.5	13.5	12.5	9.5	11.0	24.0	16.5	20.0			
25	16.0	14.0	15.0	13.5	10.0	11.5	25.0	18.5	21.0			
26	14.0	11.0	12.0	15.0	7.5	11.0	23.0	15.0	19.0			
27	14.0	11.0	12.0	17.0	8.5	12.5	21.0	16.5	19.0			
28	12.0	8.0	9.5	20.0	11.5	16.0	24.5	19.0	21.0			
29	---	---	---	22.5	15.0	18.5	23.0	17.5	20.0			
30	---	---	---	23.5	17.0	20.0	21.5	14.0	18.0			
31	---	---	---	20.0	15.5	17.5	---	---	---			
MONTH	16.5	.5	6.5	23.5	5.0	12.0	25.5	6.5	17.5			
YEAR	25.5	.0	11.0									

02087183 NEUSE RIVER NEAR FALLS, NC

LOCATION.--Lat 35°56'24", long 78°34'32", Wake County, Hydrologic Unit 03020201, on left bank, 0.3 mi downstream from bridge on Secondary Road 2000, 0.4 mi northeast of Falls, and 0.5 mi downstream from Falls Dam.

DRAINAGE AREA.--772 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1970 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 182.62 ft above National Geodetic Vertical Datum of 1929. Satellite data transmitter at station.

REMARKS.--Records good. Flow regulated by Falls Lake (station 02087182). June 5, 1980 to May 6, 1981, flows affected by incidental storage in Falls Lake under construction; May 6, 1981 to Jan. 13, 1983, gates closed and Falls Lake partially filled to provide storage for city of Raleigh water supply; Jan. 13, 1983, gates closed and normal pool elevation of 250 ft reached Dec. 7, 1983. The city of Raleigh diverted an average of 43.9 ft^3/s, 1.2 mi upstream from station for municipal water supply, most of which was returned downstream as sewage effluent. Diversion for municipal water supply for cities of Durham and Butner (stations 02086500 and 02086624).

AVERAGE DISCHARGE.--15 years, 815 ft^3/s, 14.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s July 17, 1975, gage height, 25.21 ft; minimum, 4.6 ft^3/s Sept. 24, 1980, gage height, 2.13 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1945 reached a stage of 216.1 ft above National Geodetic Vertical Datum of 1929, discharge, 23,300 ft^3/s at bridge 0.4 mi upstream, from information provided by the U. S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,480 ft^3/s Feb. 9, gage height, 14.12 ft; minimum, 39 ft^3/s Nov. 16, gage height, 2.21 ft; minimum daily, 67 ft^3/s July 27, 30, Sept. 15-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	160	e71	73	282	1750	362	169	337	368	209	68
2	281	160	e71	73	255	e323	265	169	337	185	148	68
3	251	160	e73	76	220	e323	142	170	328	165	159	68
4	190	160	e73	204	443	e150	68	166	324	332	212	68
5	213	160	e71	387	723	e70	116	165	323	293	212	68
6	241	160	70	666	727	175	197	164	322	206	211	68
7	261	160	70	990	1350	358	200	162	321	206	212	68
8	272	160	70	1680	2950	450	123	162	320	206	211	68
9	251	160	70	2350	4460	648	68	162	320	237	211	68
10	196	159	70	2040	4330	291	68	162	321	268	211	68
11	165	160	70	1310	4160	114	68	162	319	277	211	68
12	165	160	70	907	3110	202	147	163	320	252	233	68
13	165	160	70	660	3130	259	200	111	320	230	247	68
14	165	160	70	482	4400	368	200	105	320	231	241	68
15	165	160	70	357	4260	367	120	182	311	231	238	67
16	165	162	70	263	4080	368	69	184	307	232	244	67
17	165	170	70	200	3920	367	68	184	306	217	243	67
18	165	170	70	295	3770	263	68	184	305	215	244	67
19	165	170	71	361	3660	117	99	184	314	234	132	67
20	165	171	73	361	3550	68	170	185	316	234	139	68
21	166	170	73	361	3440	68	170	185	315	234	235	68
22	165	170	73	361	2990	68	120	186	315	261	232	68
23	164	170	73	361	1390	68	68	116	313	277	232	68
24	162	170	73	361	595	68	68	71	312	277	232	68
25	162	e170	73	361	705	326	131	133	347	252	234	68
26	162	e170	73	364	1830	508	173	175	366	131	234	68
27	162	e170	73	364	3090	508	172	176	365	67	234	68
28	162	e170	73	269	3060	508	171	176	364	132	233	68
29	162	e170	73	200	---	506	170	176	365	108	232	68
30	162	e90	73	200	---	506	168	231	369	67	123	68
31	161	---	73	202	---	506	---	337	---	156	68	---
TOTAL	5913	4862	2216	17139	70880	10671	4229	5257	9822	6781	6457	2035
MEAN	191	162	71.5	553	2531	344	141	170	327	219	208	67.8
MAX	317	171	73	2350	4460	1750	362	337	369	368	247	68
MIN	161	90	70	73	220	68	68	71	305	67	68	67

CAL YR 1984	TOTAL	400693	MEAN	1095	MAX	4620	MIN	70
WTR YR 1985	TOTAL	146262	MEAN	401	MAX	4460	MIN	67

e Estimated

02087183 NEUSE RIVER NEAR FALLS, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1961-1973, 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1960 to September 1967, October 1978 to September 1984.
WATER TEMPERATURE: October 1953 to September 1954, November 1960 to September 1967, October 1978 to September 1984.

REMARKS.--Station operated to define the chemical-quality characteristics of outflow from the Falls Lake. Daily records of specific conductance for period November 1960 to September 1964 are available in the district office in Raleigh, NC. For water years 1954, 1961-73, data were published as Neuse River at Falls (station 02087182).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1961-67, 1979-84): Maximum daily, 355 microsiemens Sept. 22, 1966; minimum daily, 37 microsiemens Aug. 4, 1961.
WATER TEMPERATURE (water years 1954, 1961-67, 1979-84): Maximum daily, 32.0°C Aug. 7, 16, 1980; minimum daily, 0.0°C on many days during winter months of 1960-62.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 31...	0820	160	87	6.3	20.0	10	765	8.1	89	27	0	6.4
NOV 26...	0945	170	85	6.4	10.0	5	765	11.0	97	27	0	6.4
DEC 12...	0805	70	83	6.2	8.0	10	755	10.8	92	26	0	6.2
JAN 30...	1455	200	85	6.5	3.0	15	758	13.3	99	24	0	5.6
FEB 28...	1600	3100	72	6.3	8.0	100	764	14.0	118	19	4	4.4
MAR 28...	1120	509	80	6.1	12.0	20	752	9.5	89	19	6	4.5
APR 30...	1030	170	68	7.1	20.5	15	762	9.1	101	21	0	4.8
MAY 15...	0900	182	85	6.5	15.0	40	767	8.8	87	23	0	5.6
JUN 10...	0715	320	79	7.0	24.5	20	764	7.8	93	23	0	5.3
JUL 29...	1500	67	90	6.5	27.0	15	758	8.1	102	28	0	6.6
AUG 28...	0820	234	93	6.7	27.0	20	764	7.7	96	--	--	--
SEP 24...	1000	68	105	7.2	23.0	10	766	8.1	94	29	0	6.9

02087183 NEUSE RIVER NEAR FALLS, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
OCT 31...	2.6	5.3	28	.5	2.2	3.9	4.8	.10	7.8	66	55	.09
NOV 26...	2.6	6.1	31	.5	2.3	4.2	4.8	<.10	8.2	56	54	.08
DEC 12...	2.6	5.5	29	.5	2.3	4.4	4.8	.10	8.2	52	53	.07
JAN 30...	2.4	7.7	39	.7	2.2	7.6	7.2	.20	4.7	68	51	.09
FEB 28...	2.0	5.1	34	.5	1.8	9.3	6.3	<.10	7.2	66	45	.09
MAR 28...	2.0	4.8	33	.5	1.7	8.5	5.9	<.10	6.9	54	42	.07
APR 30...	2.1	5.0	32	.5	2.0	8.3	5.4	<.10	6.5	57	47	.08
MAY 15...	2.3	4.9	29	.5	1.9	8.2	5.6	<.10	7.6	62	52	.08
JUN 10...	2.3	5.4	32	.5	2.0	8.6	7.1	.20	6.0	62	52	.08
JUL 29...	2.8	6.8	33	.6	2.0	7.6	6.7	.10	4.8	63	54	.09
AUG 28...	--	--	--	--	2.4	5.5	7.1	.10	--	42	--	.06
SEP 24...	2.9	7.9	35	.7	2.5	5.2	8.0	.10	3.2	64	62	.09

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
OCT 31...	29	--	.020	<.10	--	.270	--	--	.23	.50	--	--
NOV 26...	26	.06	.040	.10	--	.370	--	--	2.9	3.3	--	--
DEC 12...	9.8	.18	.020	.20	--	.300	--	--	.80	1.1	--	--
JAN 30...	37	.18	.020	.20	--	.120	--	--	.28	.40	--	--
FEB 28...	552	.28	.020	.30	--	.150	.060	.08	.65	.80	--	--
MAR 28...	74	.18	.020	.20	--	.130	--	--	.87	1.0	--	--
APR 30...	26	--	.010	<.10	--	.120	--	--	1.1	1.2	--	--
MAY 15...	30	.09	.010	.10	--	.380	--	--	.12	.50	--	--
JUN 10...	54	--	.010	<.10	--	.240	--	--	.16	.40	--	--
JUL 29...	11	--	.020	<.10	--	.060	--	--	.34	.40	--	--
AUG 28...	27	--	<.010	<.10	<.10	.010	--	--	.79	.80	.10	.70
SEP 24...	12	--	<.010	<.10	--	.010	--	--	.49	.50	--	--

NEUSE RIVER BASIN

02087183 NEUSE RIVER NEAR FALLS, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT 31...	--	--	.080	--	.020	--	<1	1	<10	2	460	2
NOV 26...	3.4	15	.030	--	<.010	--	<1	<1	<10	<1	710	1
DEC 12...	1.3	5.8	<.010	--	<.010	--	<1	<1	10	1	480	1
JAN 30...	.60	2.7	.050	--	.020	--	<1	<1	20	--	--	1
FEB 28...	1.1	4.9	.050	.010	.030	--	<1	<1	10	14	1300	9
MAR 28...	1.2	5.3	.010	--	<.010	--	<1	<1	10	3	470	1
APR 30...	--	--	<.010	--	<.010	--	<1	<1	10	5	260	1
MAY 15...	.60	2.7	<.010	--	.010	--	<1	1	20	2	830	2
JUN 10...	--	--	.060	--	.040	--	<1	<1	20	7	500	1
JUL 29...	--	--	<.010	--	.010	--	1	1	20	2	280	3
AUG 28...	--	--	.070	.020	.010	<.010	--	--	--	--	--	--
SEP 24...	--	--	.150	--	<.010	--	<1	2	<10	15	490	7

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 31...	610	.1	<1	10	6.1	--	3	1.3
NOV 26...	890	<.1	<1	10	6.9	--	9	4.1
DEC 12...	700	.1	<1	20	6.3	--	7	1.3
JAN 30...	--	.2	<1	<10	8.0	--	5	2.7
FEB 28...	250	.3	<1	20	7.8	.05	13	109
MAR 28...	100	<.1	<1	20	6.6	--	4	5.5
APR 30...	160	.2	<1	10	6.7	--	4	1.8
MAY 15...	1600	.2	<1	<10	--	--	9	4.4
JUN 10...	400	.3	<1	30	6.3	--	6	5.2
JUL 29...	430	<.1	<1	110	8.0	--	4	.72
AUG 28...	--	--	--	--	--	.04	4	2.5
SEP 24...	470	<.1	<1	30	7.8	--	3	.55

02087183 NEUSE RIVER NEAR FALLS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/15	0930	WATER	0	2.88	165	73	7.60	20.0		9.3	20
84/11/29	1010	WATER	0	2.90	170	54	7.30	10.0	7.2	10.2	10K
84/12/12	0910	WATER	0	2.44	70	50		8.0		11.4	50
85/01/19	0950	WATER	0	3.78	352	50		6.0		10.6	10
85/02/08	0945	WATER	0	8.95	1910	50	6.60	4.0	3.6	13.0	10K
85/03/05	0920	WATER	0	2.44	70	50	7.10	15.0		11.0	20
85/04/05	0845	WATER	0	2.43	68	53	7.10	13.0		10.2	20
85/05/14	0945	WATER	0	2.48	71	70	6.90	16.0	7.3	9.4	10K
85/06/11	0911	WATER	0	3.60	322	75	6.90	25.0		9.7	20
85/07/15	0800	WATER	0	3.15	238	90	6.90	26.0		7.6	10K
85/08/19	0915	WATER	0.1	2.55	88	81	7.00	25.0	4.8	7.5	30
85/09/17	0910	WATER	0.1	2.42	67	91	7.20	23.0		9.0	50

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/15	0930	WATER	0	35	4	95	.02	.230	.500	.030	.010K
84/11/29	1010	WATER	0	37	8	82	.11	.330	.600	.040	.010K
84/12/12	0910	WATER	0	38	4	91	.22	.250	.200	.040	.010K
85/01/19	0950	WATER	0		4	86	.24	.160	.500	.030	.010K
85/02/08	0945	WATER	0	64	10	88	.26	.080	.600	.040	.010K
85/03/05	0920	WATER	0		12	79	.35	.140	.400	.090	.010K
85/04/05	0845	WATER	0	24	7	68	.22	.180	.500	.030	.010K
85/05/14	0945	WATER	0		8	89	.10	.390	.700	.040	.010K
85/06/11	0911	WATER	0	21	6	75	.01	.050	.300	.030	.010K
85/07/15	0800	WATER	0	28	8	74	.01	.070	.400	.040	.010
85/08/19	0915	WATER	0.1	30	11	79	.02	.130	.400	.030	.010K
85/09/17	0910	WATER	0.1	36	6	130	.03	.030	.500	.030	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/29	1010	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/08	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/14	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/19	0915	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

NEUSE RIVER BASIN

0208732885 MARSH CREEK NEAR NEW HOPE, NC

LOCATION.--Lat 35°48'59", long 78°35'37", Wake County, Hydrologic Unit 03020201, on right upstream wingwall, 0.2 mi downstream from US 401, and 2.9 mi southwest of New Hope.

DRAINAGE AREA.--6.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 198 ft above National Geodetic Vertical Datum of 1929, from topographic map. Recording rain gage at station since September 1985.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR CURRENT PERIOD.--January 1984 to September 1985: Peak discharges greater than base discharge of 187 ft^3/s and maximum (*) :

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11, 1984	0015	444	8.39	May 30	0215	421	8.19
Jan. 19	0130	229	6.02	May 30	1115	278	6.60
Feb. 14	0645	221	5.92	June 28	2400	208	5.75
Feb. 23	1100	283	6.66	June 30	2045	223	5.95
Feb. 27	1700	266	6.47	July 16	2100	367	7.67
Mar. 28	1200	355	7.55	Feb. 1, 1985	0100	332	7.26
Mar. 28	2230	381	7.80	Feb. 2	0700	198	5.62
Apr. 23	0500	196	5.59	Feb. 26	0130	208	5.75
May 8	0545	195	5.58	May 22	2030	207	5.74
May 29	1315	*1,320	*10.54	June 29	2200	243	6.19

Minimum discharge, 0.79 ft^3/s June 26-29, Sept. 14, 18, 22, 28, 29, 1985; minimum gage height, 2.35 ft, Sept. 14, 18, 22, 28, 29, 1985.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR JANUARY TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				5.7	3.1	7.2	6.7	5.1	9.6	26	7.4	2.4
2				5.4	3.1	5.7	5.4	4.6	7.3	8.7	5.6	2.2
3				5.2	6.1	4.9	5.1	5.9	5.9	7.3	4.4	2.1
4				5.1	15	4.5	13	4.5	5.0	3.1	3.7	2.1
5				5.1	7.1	10	15	4.0	4.5	3.1	3.4	2.0
6				4.8	8.8	37	5.8	4.4	4.1	42	3.1	1.9
7				4.5	6.3	22	4.6	7.0	3.8	12	3.0	1.9
8				4.5	4.5	9.4	4.2	43	3.6	4.4	2.9	1.8
9				4.4	4.7	7.6	7.2	8.5	3.2	3.6	7.2	1.9
10				118	4.5	5.8	29	5.0	3.0	3.4	4.5	2.1
11				115	5.5	5.3	8.0	4.3	3.0	3.0	3.7	3.0
12				17	4.3	4.8	5.3	4.2	2.9	2.5	3.3	3.1
13				12	4.0	26	4.6	4.0	2.8	44	9.5	5.2
14				11	77	8.5	10	3.9	2.7	6.6	4.4	15
15				6.9	12	6.2	17	3.9	2.7	11	3.2	3.3
16				5.5	7.6	5.3	8.9	3.9	2.7	101	2.8	2.4
17				4.9	5.5	4.7	5.6	3.8	2.7	56	2.6	2.2
18				37	4.6	4.5	4.6	4.0	2.6	33	2.5	2.2
19				74	4.1	28	5.0	4.1	3.5	38	2.6	2.1
20				12	3.9	8.8	5.3	3.9	6.4	9.7	2.5	2.0
21				7.9	3.6	52	3.9	3.7	4.2	24	2.4	1.9
22				5.3	3.4	9.0	15	3.7	3.0	11	2.3	1.7
23				4.6	90	5.8	82	6.6	3.7	7.5	2.7	1.7
24				7.4	17	4.7	13	7.6	9.6	5.9	2.4	1.8
25				8.6	9.0	9.1	7.8	4.4	3.8	4.8	2.0	1.8
26				5.0	6.2	5.8	5.6	4.0	2.6	4.1	2.0	1.6
27				4.4	77	4.5	5.0	9.3	2.3	11	2.0	1.5
28				3.8	25	135	4.9	13	8.3	19	2.0	1.9
29				3.7	9.6	81	4.8	397	43	20	5.4	1.9
30				3.6	---	14	5.5	198	41	9.0	2.8	3.1
31				3.2	---	9.7	---	25	---	8.2	4.6	---
TOTAL				515.5	432.5	546.8	317.8	804.3	203.5	542.9	112.9	79.8
MEAN				16.6	14.9	17.6	10.6	25.9	6.78	17.5	3.64	2.66
MAX				118	90	135	82	397	43	101	9.5	15
MIN				3.2	3.1	4.5	3.9	3.7	2.3	2.5	2.0	1.5
CFSM				2.43	2.18	2.57	1.55	3.79	.99	2.56	.53	.39
IN.				2.80	2.35	2.97	1.73	4.37	1.11	2.95	.61	.43

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	2.5	2.3	2.0	126	4.4	2.8	1.6	1.3	38	5.6	1.3
2	5.6	2.5	7.3	5.7	90	4.0	2.3	1.7	1.2	13	3.7	1.2
3	4.3	2.2	33	73	14	3.5	2.2	14	1.2	2.5	2.1	1.3
4	3.7	3.8	4.6	42	7.3	3.3	2.2	3.6	1.1	1.5	1.9	1.2
5	3.2	3.2	33	9.5	17	3.2	2.2	2.6	1.4	1.3	1.8	1.2
6	2.9	2.0	13	5.0	14	2.8	3.2	2.4	1.2	2.5	1.8	1.2
7	2.9	1.9	4.1	4.2	6.3	2.6	2.1	2.3	1.2	1.5	1.8	1.1
8	2.8	1.9	3.1	3.6	4.5	2.9	2.0	2.2	1.4	1.1	1.8	1.2
9	2.7	2.0	2.6	3.1	3.9	2.9	2.0	2.3	1.1	1.1	1.8	1.1
10	2.7	1.9	2.6	3.3	3.6	2.8	2.0	2.4	1.1	1.5	1.8	1.1
11	2.6	5.3	2.4	3.1	3.3	2.8	2.2	2.4	1.2	8.0	1.6	1.1
12	2.7	2.3	2.4	2.9	57	2.8	2.1	9.9	3.8	1.3	1.6	.99
13	2.5	1.9	2.4	2.8	13	2.7	2.1	5.2	2.0	4.1	1.6	1.1
14	2.5	1.9	2.4	2.8	9.1	2.8	2.1	2.6	1.1	15	1.4	.87
15	2.4	1.9	2.3	2.6	7.8	2.5	2.2	2.3	1.1	3.2	1.4	.89
16	2.4	2.0	2.2	2.5	7.3	2.6	3.6	5.6	3.1	4.8	16	.90
17	2.5	1.9	2.2	7.4	7.2	2.6	2.4	4.1	1.2	2.1	5.0	.89
18	2.6	1.9	2.2	3.7	7.0	2.4	1.9	3.2	1.2	1.2	22	.88
19	2.7	2.2	2.1	3.1	7.0	2.3	1.9	2.1	8.8	1.1	3.4	.90
20	2.5	1.9	2.4	3.1	7.7	2.4	1.8	2.0	1.3	1.0	2.0	.90
21	4.7	1.9	2.2	3.1	6.8	2.6	1.7	3.0	1.2	1.1	2.7	.86
22	4.2	1.9	2.8	2.8	6.7	15	1.7	14	1.2	1.1	1.9	3.0
23	3.0	2.0	2.2	2.2	6.7	6.2	1.7	6.0	1.1	1.2	1.8	1.2
24	2.6	2.0	2.1	2.7	6.6	6.4	1.7	3.3	1.1	1.6	1.9	1.0
25	2.5	2.0	2.1	2.7	8.0	7.9	1.7	2.0	1.1	27	13	.97
26	2.5	2.0	2.0	2.5	54	4.1	1.8	1.8	.99	4.9	3.9	1.1
27	2.5	2.0	2.0	2.5	8.0	3.3	1.6	1.7	.87	2.7	2.4	2.0
28	2.4	12	2.1	4.3	5.2	3.1	1.7	1.6	.89	2.6	1.6	.87
29	2.5	3.5	2.1	5.0	---	3.0	1.7	1.6	26	3.3	11	.85
30	2.5	2.5	2.0	3.8	---	2.7	1.7	1.5	53	2.8	6.5	1.0
31	2.5	---	2.0	62	---	2.5	---	1.4	---	2.1	1.7	---
TOTAL	128.1	78.9	152.2	279.0	515.0	115.1	62.3	112.4	124.45	156.2	128.5	34.17
MEAN	4.13	2.63	4.91	9.00	18.4	3.71	2.08	3.63	4.15	5.04	4.15	1.14
MAX	40	12	33	73	126	15	3.6	14	53	38	22	3.0
MIN	2.4	1.9	2.0	2.0	3.3	2.3	1.6	1.4	.87	1.0	1.4	.85
CFSM	.60	.38	.72	1.32	2.69	.54	.30	.53	.61	.74	.61	.17
IN.	.70	.43	.83	1.52	2.80	.63	.34	.61	.68	.85	.70	.19

CAL YR 1984 TOTAL 3915.2 MEAN 10.7 MAX 397 MIN 1.5 CFSM 1.56 IN. 21.29
WTR YR 1985 TOTAL 1886.32 MEAN 5.17 MAX 126 MIN .85 CFSM .76 IN. 10.26

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1984 to February 1985 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1984 to February 1985.
WATER TEMPERATURE: February 1984 to February 1985.

INSTRUMENTATION.--Water-quality monitor from February 1984 to February 1985.

REMARKS.--Station operated as part of a study of effects of land-use on the biological habitat of Piedmont streams. Interruptions in the daily record were due to malfunctions of the monitor.

EXTREMES FOR CURRENT PERIOD.--January 1984 to February 1985:
SPECIFIC CONDUCTANCE: Maximum, 321 microsiemens Jan. 28, 1985; minimum, 37 microsiemens May 29, 1984.
WATER TEMPERATURE: Maximum, 27.5°C Aug. 9, 1985; minimum, 1.0°C Jan. 27, Feb. 9, 1984.

WATER QUALITY DATA, JANUARY 1984 TO FEBRUARY 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
FEB , 1984												
23...	0755	59	70	6.5	10.0	10.7	98	5.3	58	.40	.33	.310
MAR												
28...	1415	314	52	6.6	15.0	9.0	93	2.6	26	.30	.19	.240
APR												
23...	1415	39	80	6.5	11.0	10.1	93	3.6	61	.30	.26	.150
MAY												
21...	1445	3.7	102	6.4	21.5	8.2	94	6.7	81	.80	.78	.050
29...	1350	1240	37	6.2	--	--	--	2.0	68	.30	.13	.330
JUL												
17...	1530	27	70	6.6	22.0	9.1	105	3.0	366	.30	.22	.130
AUG												
14...	1300	4.2	92	6.3	25.0	6.8	83	.10	70	.50	.48	.040
SEP												
26...	1305	1.8	119	6.8	22.0	7.8	90	8.8	77	.60	.53	.040
OCT												
29...	1315	2.5	110	6.5	21.5	7.6	86	6.8	83	.40	.40	.020
NOV												
26...	1445	2.0	105	6.4	9.0	10.6	91	6.6	71	.70	.64	.060
DEC												
12...	1325	3.2	100	6.0	9.0	10.1	88	6.4	84	.50	.53	.110
FEB , 1985												
01...	0945	69	80	5.9	6.0	12.0	98	8.1	63	.70	.40	.290

WATER QUALITY DATA, JANUARY 1984 TO FEBRUARY 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
FEB , 1984												
23...	.250	2.4	.40	2.8	.060	<.010	.080	.030	<1	<1	9	10
MAR												
28...	.250	1.2	1.0	1.5	.100	.020	.080	<.010	1	<1	11	<10
APR												
23...	.120	1.9	1.2	2.2	.090	.020	.040	<.010	1	1	5	<10
MAY												
21...	--	.50	.10	1.3	.050	.010	.020	.020	1	<1	13	<10
29...	.190	1.5	1.5	1.8	.240	.050	.170	.030	<1	<1	9	<10
JUL												
17...	.030	.60	.20	.90	.120	.010	.110	<.010	2	<1	3	<10
AUG												
14...	.050	.30	.40	.80	.050	.030	.020	.020	1	<1	2	<10
SEP												
26...	.030	1.0	.60	1.6	.080	.050	.060	.040	1	1	<1	<10
OCT												
29...	.030	.30	.40	.70	.080	.040	.040	.020	<1	<1	1	<10
NOV												
26...	<.010	.60	.20	1.3	.030	<.010	.040	.010	<1	2	<1	<10
DEC												
12...	.080	.40	.20	.90	.070	<.010	.020	<.010	<1	<1	1	<10
FEB , 1985												
01...	.220	.50	.50	1.2	.200	.040	.150	.040	2	<1	17	<10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
FEB												
23...	22	2	16000	42	46	3	320	79	5	<1	110	16
MAR												
28...	29	2	19000	40	46	1	260	80	7	<1	70	10
APR												
23...	4	1	2300	30	8	1	210	110	2	<1	20	9
MAY												
21...	5	<1	1000	14	<1	<1	120	120	3	1	20	9
29...	64	3	10000	550	34	6	220	91	8	1	50	11
JUL												
17...	8	3	670	50	13	2	150	21	4	1	30	12
AUG												
14...	3	4	910	19	4	1	100	82	5	<1	20	8
SEP												
26...	2	1	560	14	2	--	80	71	1	1	20	3
OCT												
29...	<1	1	900	52	1	1	160	110	2	<1	30	--
NOV												
26...	2	<1	580	82	2	1	90	87	<1	<1	50	9
DEC												
12...	2	1	1100	98	1	--	210	190	1	1	10	12
FEB , 1985												
01...	8	4	5700	65	16	3	220	79	3	1	40	17

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

WATER QUALITY DATA, JANUARY TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)
JAN			
11...	0029	442	484
11...	0211	374	275
11...	0319	351	363
11...	0415	307	353
11...	0650	118	219
11...	1355	45	79
FEB			
14...	1100	93	235
14...	1130	80	224
14...	1500	45	145
23...	0755	59	334
MAR			
06...	1715	27	47
25...	0830	9.0	41
28...	1100	291	1160
28...	1115	315	1600
28...	1130	342	1350
28...	1330	329	535
28...	1400	320	489
28...	1415	314	501
28...	1540	197	485
28...	1615	122	309
28...	1900	51	158
APR			
23...	1415	39	130
MAY			
11...	0920	4.6	12
21...	1445	3.7	5
29...	1100	931	552
29...	1115	1000	588
29...	1245	1260	526
29...	1345	1230	388
29...	1350	1240	399
JUN			
13...	1215	3.7	9
29...	0800	29	118
JUL			
17...	1530	27	160
AUG			
09...	1415	20	655
09...	1445	66	664
14...	1300	4.2	11
SEP			
26...	1305	1.8	3

WATER QUALITY DATA, OCTOBER 1984 TO FEBRUARY 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)
OCT			
29...	1315	2.5	2
NOV			
26...	1445	2.0	3
DEC			
12...	1325	3.2	7
JAN			
03...	1330	62	109
31...	2315	280	1300
FEB			
01...	0945	69	233
01...	1204	60	270
01...	1230	57	234

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, FEBRUARY TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	105	102	104	---	---	---	92	89	91	110	107	108
2	107	103	104	---	---	---	89	84	86	111	108	109
3	114	82	101	---	---	---	87	84	86	111	103	105
4	87	80	84	---	---	---	88	71	85	110	108	109
5	96	89	92	---	---	---	90	76	83	123	111	115
6	314	97	146	---	---	---	108	90	99	128	112	119
7	116	109	112	80	66	74	103	93	98	114	104	110
8	114	110	113	96	84	89	99	95	97	109	73	93
9	118	107	112	98	92	96	98	83	94	102	96	100
10	112	107	110	100	97	99	90	74	81	107	103	105
11	157	111	128	100	97	99	99	91	95	110	107	108
12	137	122	126	101	98	100	111	99	101	109	107	108
13	---	---	---	103	65	80	105	103	104	108	106	107
14	91	58	79	94	73	82	106	79	100	109	106	107
15	101	90	94	117	95	104	96	86	91	109	106	108
16	---	---	---	181	119	141	103	96	100	109	107	107
17	---	---	---	224	185	207	115	104	110	109	105	107
18	---	---	---	221	167	182	114	111	113	110	101	107
19	---	---	---	195	74	110	112	106	110	105	101	103
20	---	---	---	97	90	93	116	105	111	104	102	103
21	---	---	---	93	54	71	115	108	111	104	101	103
22	---	---	---	96	91	93	110	77	106	119	100	104
23	---	---	---	100	96	98	85	67	78	113	60	101
24	---	---	---	101	98	100	91	86	89	81	72	76
25	---	---	---	101	77	90	103	92	96	84	81	82
26	---	---	---	99	89	92	103	100	101	83	79	81
27	---	---	---	100	93	96	104	103	104	80	52	77
28	---	---	---	150	48	81	107	103	104	83	60	75
29	---	---	---	72	56	66	110	106	108	72	37	50
30	---	---	---	84	73	78	109	106	107	---	---	---
31	---	---	---	91	85	87	---	---	---	---	---	---
MONTH	314	58	108	224	48	100	116	67	98	128	37	100

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	82	66	76	104	80	89	103	98	100
2	---	---	---	88	68	84	112	105	109	105	100	102
3	---	---	---	90	69	82	106	94	99	102	99	101
4	---	---	---	96	90	93	95	91	93	107	100	103
5	---	---	---	95	79	94	93	92	92	110	104	107
6	---	---	---	83	64	75	95	91	93	111	104	107
7	---	---	---	85	75	80	99	93	95	111	103	106
8	---	---	---	90	86	89	104	96	99	109	102	105
9	---	---	---	94	90	91	109	76	96	103	99	101
10	---	---	---	93	92	92	102	93	99	104	99	101
11	---	---	---	95	93	93	103	99	101	105	98	102
12	---	---	---	100	95	97	104	99	102	102	99	100
13	---	---	---	100	70	79	101	60	89	106	71	99
14	106	103	104	91	86	89	98	81	92	92	58	78
15	107	103	105	87	79	83	102	95	99	98	93	96
16	111	106	108	91	59	82	105	100	102	110	98	99
17	132	103	107	73	61	68	120	100	104	114	105	110
18	109	105	106	75	69	72	102	99	101	115	106	110
19	118	94	107	75	66	70	101	98	99	111	106	108
20	119	86	106	82	70	78	104	100	101	119	106	111
21	103	93	99	96	42	77	107	103	105	113	105	109
22	104	101	102	82	69	78	107	101	104	112	105	109
23	105	82	103	89	83	86	105	101	103	111	104	108
24	98	77	88	92	89	91	109	103	106	121	104	111
25	101	96	98	95	92	94	108	104	105	121	110	116
26	115	100	103	96	94	95	105	99	102	124	116	120
27	115	106	109	99	63	90	107	99	102	125	114	117
28	109	64	104	95	66	81	110	102	105	123	113	118
29	82	61	74	97	73	86	108	84	96	123	112	116
30	88	56	78	87	76	82	102	94	98	112	58	105
31	---	---	---	90	78	87	116	80	92	---	---	---
MONTH	132	56	100	100	42	84	120	60	99	125	58	106
YEAR	314	37	99									

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

TEMPERATURE, WATER (DEG. C), FEBRUARY TO SEPTEMBER 1984

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	5.5	6.0	---	---	---	14.5	7.5	10.5	20.5	17.0	18.5
2	8.0	5.5	6.0	---	---	---	16.0	4.5	8.5	18.0	15.0	16.5
3	9.0	5.5	7.0	---	---	---	14.0	7.5	10.0	19.0	16.5	17.5
4	9.0	5.5	7.0	---	---	---	15.5	9.5	12.0	20.5	17.5	18.5
5	7.0	2.5	4.5	---	---	---	17.5	10.0	14.0	20.0	15.0	18.0
6	7.5	3.0	6.5	---	---	---	15.5	10.5	13.5	19.0	16.5	18.0
7	7.0	5.5	6.0	9.0	5.5	8.5	17.0	10.5	13.5	21.0	18.0	19.5
8	6.5	5.5	6.0	11.0	5.5	8.0	14.5	8.5	12.0	23.0	19.5	21.0
9	9.0	5.5	6.5	10.0	5.5	7.5	12.5	9.5	11.5	20.0	18.0	19.0
10	9.5	5.0	6.5	9.5	4.5	6.5	9.5	8.0	8.5	19.5	15.0	17.5
11	12.5	6.5	10.0	12.5	4.5	8.0	16.5	6.5	11.5	19.5	14.0	17.0
12	15.5	7.0	10.5	12.5	6.0	9.0	17.0	8.0	13.0	20.0	16.0	18.0
13	---	---	---	9.0	6.0	7.5	18.0	10.0	15.0	20.5	17.0	19.0
14	---	---	---	15.0	6.5	10.0	20.0	16.0	17.5	21.5	18.5	19.5
15	---	---	---	16.0	6.0	11.0	19.5	17.0	18.0	19.0	15.0	17.5
16	---	---	---	19.0	9.0	14.0	18.5	16.0	17.5	18.0	13.5	15.5
17	---	---	---	18.5	12.5	15.0	18.0	13.5	16.0	17.5	10.0	14.0
18	---	---	---	18.0	11.5	14.5	16.5	12.0	14.5	18.5	12.5	15.5
19	---	---	---	16.0	12.0	14.0	17.0	10.5	14.0	21.0	15.5	18.5
20	---	---	---	17.5	12.0	14.5	18.5	12.0	15.5	22.5	18.0	20.0
21	---	---	---	17.0	13.0	15.0	16.5	15.0	15.5	22.5	18.5	20.5
22	---	---	---	17.5	11.0	13.5	15.0	9.0	13.0	23.0	19.0	21.0
23	---	---	---	17.5	8.5	12.5	12.0	9.0	10.5	21.5	20.0	21.0
24	---	---	---	17.0	5.5	11.5	15.0	10.0	12.0	22.0	19.0	20.5
25	---	---	---	17.5	11.0	14.5	18.5	8.5	14.0	20.5	18.0	19.5
26	---	---	---	16.5	10.5	13.5	19.5	13.0	16.5	23.0	19.0	21.0
27	---	---	---	16.0	7.5	12.5	20.0	15.5	18.0	22.0	20.5	21.0
28	---	---	---	16.5	9.5	13.0	18.5	16.0	17.5	24.5	21.0	22.5
29	---	---	---	10.5	8.0	9.5	19.5	16.0	18.0	---	---	---
30	---	---	---	14.5	7.0	10.0	19.5	17.5	18.5	---	---	---
31	---	---	---	14.5	6.5	10.0	---	---	---	---	---	---
MONTH	15.5	2.5	7.0	19.0	4.5	11.5	20.0	4.5	14.0	24.5	10.0	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	27.0	23.0	24.5	24.0	21.5	22.5	23.5	19.0	21.0
2	---	---	---	25.0	22.5	24.0	25.0	22.5	23.5	24.0	18.5	21.5
3	---	---	---	25.5	21.5	23.5	25.5	22.5	24.0	25.0	20.5	22.5
4	---	---	---	24.5	21.5	23.0	26.0	22.5	24.0	23.0	21.0	22.5
5	---	---	---	25.5	22.0	23.5	26.0	22.5	24.0	22.5	19.0	20.5
6	---	---	---	25.0	23.0	23.5	26.0	22.5	24.0	21.5	17.0	19.0
7	---	---	---	25.5	22.5	24.0	26.0	23.0	24.5	21.0	15.0	18.5
8	---	---	---	23.5	20.0	22.0	25.5	22.5	24.0	21.0	13.5	18.0
9	---	---	---	22.5	18.0	20.0	27.5	22.5	24.5	21.5	17.0	19.5
10	---	---	---	23.0	19.5	21.5	25.0	22.5	23.5	21.5	19.5	20.5
11	---	---	---	25.0	21.0	23.0	24.5	22.0	23.0	23.5	20.0	21.0
12	---	---	---	25.0	22.0	23.5	24.0	21.5	23.0	24.0	21.5	22.5
13	---	---	---	25.0	23.0	24.0	26.0	22.0	23.5	23.0	22.0	22.5
14	25.5	22.5	24.0	24.0	22.0	23.0	25.5	22.5	24.0	25.5	23.0	24.0
15	24.0	21.5	22.5	25.5	22.0	23.5	25.0	22.5	23.5	25.5	22.0	23.5
16	22.5	21.0	22.0	23.5	21.5	22.5	24.5	21.0	23.0	21.5	17.0	20.0
17	24.0	21.0	22.0	22.5	21.0	21.5	24.5	20.5	22.5	19.5	13.5	16.5
18	25.0	21.0	23.0	22.0	21.0	21.5	24.0	21.0	22.5	19.5	14.0	17.0
19	26.5	22.0	23.5	24.5	20.0	22.0	24.0	21.5	22.5	20.0	12.5	16.5
20	24.5	22.5	23.5	22.5	20.5	21.5	23.5	20.5	21.5	21.0	12.5	17.0
21	24.0	22.5	23.0	22.5	20.0	21.5	23.0	18.5	20.5	22.0	15.5	19.0
22	23.5	20.5	22.0	22.5	20.5	21.5	23.0	18.5	20.5	22.5	18.0	20.0
23	23.0	20.0	22.0	23.0	21.0	22.0	23.5	19.5	21.5	22.5	16.5	19.5
24	24.0	22.5	23.0	24.5	21.0	22.5	23.5	20.0	21.5	22.5	17.5	20.0
25	24.5	21.5	23.0	24.0	21.5	22.5	23.0	19.0	20.5	23.0	18.5	20.5
26	23.5	20.0	22.0	24.0	21.0	22.5	22.5	17.0	20.0	23.0	18.5	20.5
27	23.5	19.0	21.5	24.0	21.5	22.5	22.5	17.5	20.0	18.5	12.0	15.5
28	26.0	21.0	22.5	22.5	21.5	22.5	22.5	19.0	21.0	13.0	11.0	12.0
29	26.0	22.0	24.0	21.5	20.0	20.5	23.5	20.0	21.5	12.5	10.5	11.5
30	26.0	22.5	24.0	22.0	20.0	21.0	24.5	20.5	22.5	17.0	12.5	15.0
31	---	---	---	22.0	20.0	21.0	24.5	21.0	22.5	---	---	---
MONTH	26.5	19.0	23.0	27.0	18.0	22.5	27.5	17.0	22.5	25.5	10.5	19.5
YEAR	27.5	2.5	18.0									

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIENEMS/CM AT 25 DEG. C, OCTOBER 1984 TO FEBRUARY 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	95	56	83	110	103	107	122	104	109	108	102	105
2	100	95	97	114	103	108	110	58	102	104	80	99
3	105	97	101	130	107	113	95	69	87	86	66	78
4	103	97	100	146	100	128	102	96	98	92	72	81
5	102	98	100	111	97	104	103	65	82	94	84	89
6	107	100	102	117	101	107	94	76	88	104	95	99
7	104	100	103	157	112	127	115	95	101	106	98	102
8	105	99	102	188	124	154	111	102	106	111	100	104
9	109	101	104	194	133	162	110	98	104	112	102	107
10	109	102	105	203	146	171	104	99	102	123	109	114
11	108	102	105	172	75	104	105	99	102	109	100	106
12	136	104	118	114	92	100	106	99	102	114	104	109
13	135	105	117	136	93	112	103	100	101	114	99	107
14	115	101	108	130	92	109	103	99	102	121	99	107
15	116	103	108	153	95	118	107	101	104	111	98	104
16	112	104	109	110	93	101	104	101	102	122	97	109
17	118	105	109	151	96	117	103	100	102	124	87	96
18	110	105	108	170	98	126	108	103	105	98	87	92
19	115	103	108	107	97	101	109	104	106	102	90	94
20	112	103	108	111	102	106	120	107	109	---	---	---
21	110	95	103	113	103	107	116	109	113	---	---	---
22	104	90	99	109	102	105	118	104	109	---	---	---
23	114	95	104	108	102	105	107	103	104	---	---	---
24	112	105	108	112	104	107	114	105	109	---	---	---
25	113	105	109	111	104	107	112	107	109	158	138	147
26	117	106	111	111	105	109	114	105	109	155	125	140
27	121	113	117	113	107	110	112	104	108	144	122	133
28	114	105	110	111	73	100	106	103	104	321	126	264
29	115	105	111	106	94	101	108	105	106	297	194	241
30	113	107	111	110	104	107	108	104	106	216	164	195
31	112	105	109	---	---	---	107	104	106	211	60	127
MONTH	136	56	106	203	73	114	122	58	103	321	60	121

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	113	61	90									
2	106	66	78									
3	110	97	104									
4	116	105	110									
5	117	65	99									
6	109	82	102									
7	115	105	111									
8	121	110	117									
9	144	112	125									
10	131	109	122									
11	131	111	123									
12	101	43	78									
13	123	102	110									
14	134	111	121									
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH	144	43	106									
YEAR	321	43	110									

0208732885 MARSH CREEK NEAR NEW HOPE, NC--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1984 TO FEBRUARY 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	14.5	16.0	19.0	16.5	17.5	10.0	5.0	7.0	18.0	10.5	14.0
2	17.0	10.5	14.0	20.5	16.0	18.0	9.5	5.0	7.0	18.5	15.5	16.5
3	17.5	7.5	12.5	15.0	11.0	12.0	9.5	7.5	8.5	14.0	7.5	9.5
4	18.5	9.5	14.5	16.5	11.0	13.5	8.5	4.5	7.0	7.5	5.5	7.0
5	19.0	12.5	16.5	17.5	13.5	15.0	7.0	5.5	6.5	9.0	5.0	7.0
6	19.0	15.0	17.0	14.5	8.5	11.5	6.5	3.0	5.5	8.5	3.0	5.5
7	17.5	13.0	16.0	14.5	9.0	11.0	6.5	2.5	4.0	8.0	4.5	5.5
8	19.5	14.5	17.0	18.5	10.5	14.5	6.0	4.5	5.5	7.0	4.5	5.5
9	19.5	14.0	16.5	19.5	12.0	15.5	7.0	4.5	5.5	6.5	5.0	6.0
10	19.0	14.0	17.0	20.0	14.0	16.5	8.0	4.5	6.5	8.5	6.0	7.0
11	19.0	15.5	17.0	17.0	10.0	14.0	11.0	6.0	8.0	6.0	5.0	6.0
12	19.0	14.0	16.5	11.0	8.0	9.5	10.0	6.0	7.5	7.0	5.5	6.5
13	19.0	13.5	16.0	13.0	8.0	10.5	12.0	6.0	9.0	7.5	4.5	6.0
14	19.0	9.5	14.5	13.0	8.5	10.5	14.0	7.5	10.0	8.5	4.5	6.0
15	18.5	9.5	14.5	16.0	9.0	12.0	15.0	9.0	11.5	7.0	4.5	5.5
16	20.0	14.5	17.0	15.0	9.5	11.5	12.0	9.5	11.0	8.5	4.5	6.5
17	19.0	16.0	17.5	16.5	10.0	12.0	16.5	11.5	13.0	7.5	2.5	4.5
18	19.0	17.0	18.0	19.0	9.5	13.0	16.5	9.5	13.0	5.0	3.0	4.0
19	21.0	17.0	19.0	11.0	8.5	10.0	17.5	11.5	14.5	6.5	4.0	5.0
20	22.0	17.5	19.5	8.5	5.5	7.5	16.0	13.5	15.0	---	---	---
21	22.0	18.5	20.0	6.5	5.0	5.5	17.5	14.5	15.5	---	---	---
22	22.0	18.5	20.0	6.5	4.0	5.0	16.5	12.0	15.5	---	---	---
23	21.5	19.0	20.0	8.0	4.0	5.5	12.0	7.0	10.0	---	---	---
24	22.0	19.0	20.0	8.0	4.0	5.5	10.0	6.0	8.5	---	---	---
25	20.5	17.5	19.0	8.0	4.0	6.0	14.0	8.0	11.0	6.0	2.5	4.0
26	20.0	16.5	18.0	9.0	4.0	6.5	10.0	6.0	8.0	4.0	2.0	3.0
27	20.0	14.0	17.5	10.5	5.0	7.5	13.5	9.0	10.5	4.0	1.0	3.0
28	22.0	18.5	20.0	15.5	9.0	12.0	15.5	8.0	11.0	4.5	4.0	4.0
29	22.0	19.0	20.0	9.5	5.5	7.5	17.0	9.0	12.5	5.0	3.5	4.0
30	19.0	18.5	19.0	9.0	4.5	6.5	18.0	11.5	14.5	6.0	4.0	5.0
31	19.5	18.0	19.0	---	---	---	15.5	11.5	13.5	7.0	4.5	5.5
MONTH	22.0	7.5	17.5	20.5	4.0	11.0	18.0	2.5	10.0	18.5	1.0	6.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	6.0	6.5									
2	6.0	6.0	6.0									
3	6.5	5.5	6.0									
4	6.0	4.5	5.5									
5	4.5	3.5	4.0									
6	6.0	4.0	5.0									
7	6.5	4.5	5.5									
8	5.0	2.0	3.5									
9	5.0	1.0	3.0									
10	6.5	1.5	4.0									
11	7.0	3.0	5.0									
12	8.5	5.0	6.5									
13	6.5	4.0	5.0									
14	8.0	3.5	6.0									
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH	8.5	1.0	5.0									
YEAR	22.0	1.0	10.5									

02087500 NEUSE RIVER NEAR CLAYTON, NC

LOCATION.--Lat 35°38'50", long 78°24'22", Johnston County, Hydrologic Unit 03020201, on left bank at downstream side of bridge on State Highway 42, 2.3 mi upstream from Mill Creek, and 3 mi east of Clayton.

DRAINAGE AREA.--1,150 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 1032: 1930, 1935(M). WSP 1333: 1935. WSP 1503: 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 128.41 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 18, 1942, at site 1,100 ft upstream at same datum. Satellite data transmitter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Falls Lake (station 02087182). Diversions for municipal water supply for cities of Durham and Butner (stations 02086500 and 02086624). The city of Raleigh diverted from Swift Creek (station 02087701), a downstream tributary, an average of 1.6 ft^3/s, and from the Neuse River upstream from station an average of 43.9 ft^3/s, most of which was returned as sewage effluent upstream from station.

COOPERATION.--Chemical and biological data shown in last table were provided by North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--58 years, 1,173 ft^3/s, 13.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,900 ft^3/s Sept. 19, 1945, gage height, 22.12 ft; minimum, 44 ft^3/s Sept. 15, 1932, gage height, 0.28 ft, site then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 23, 1919, reached a stage of 21.15 ft, from floodmark at former site, discharge, 21,200 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,640 ft^3/s Feb. 12, gage height, 9.33 ft; minimum, 78 ft^3/s Sept. 18 gage height, 0.97 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	289	332	233	2850	3320	721	289	423	923	308	176
2	729	291	269	236	4280	1450	510	283	411	802	536	161
3	477	282	687	650	2980	713	453	389	405	407	328	160
4	382	279	620	1740	1370	653	321	478	395	333	287	151
5	312	334	411	1680	1420	515	261	340	401	428	300	130
6	323	313	961	1040	1800	378	321	305	488	356	294	153
7	345	290	613	1300	1700	470	367	290	424	321	298	147
8	e360	282	405	1490	2290	617	352	278	411	295	291	145
9	e390	283	350	2280	3470	802	284	275	405	283	309	136
10	332	285	318	2470	4240	920	239	282	395	316	318	142
11	297	296	299	1940	4300	460	240	277	395	423	289	141
12	266	356	279	1540	5100	379	246	312	383	398	277	119
13	264	317	268	985	4530	430	313	537	508	328	314	116
14	261	303	265	891	3920	502	361	306	416	319	349	114
15	258	294	261	619	4400	582	375	251	386	363	329	110
16	259	296	254	544	4340	551	375	345	421	313	303	105
17	267	296	255	460	4160	562	397	366	489	411	524	125
18	305	300	257	500	3980	562	288	331	440	300	499	127
19	293	306	259	568	3800	407	262	297	481	285	591	119
20	283	324	249	588	3700	300	280	280	487	290	322	122
21	274	310	254	546	3580	290	331	278	412	283	278	121
22	e300	305	250	554	3470	386	316	362	390	303	430	122
23	e380	308	260	551	2830	523	265	415	379	338	351	159
24	315	307	242	557	1430	380	216	357	374	353	329	146
25	300	308	239	563	760	436	212	259	377	633	350	136
26	297	324	231	553	1880	744	266	276	413	878	680	133
27	291	330	233	538	3240	789	299	294	417	427	501	159
28	289	348	235	556	3460	759	299	283	414	328	404	153
29	291	544	233	476	---	741	303	275	419	557	362	131
30	291	432	234	425	---	728	298	271	739	482	462	129
31	290	---	237	580	---	733	---	345	---	296	271	---
TOTAL	10931	9532	10260	27653	89280	21082	9771	9926	12898	12772	11484	4088
MEAN	353	318	331	892	3189	680	326	320	430	412	370	136
MAX	1210	544	961	2470	5100	3320	721	537	739	923	680	176
MIN	258	279	231	233	760	290	212	251	374	283	271	105

CAL YR 1984 TOTAL 567161 MEAN 1550 MAX 7010 MIN 231
WTR YR 1985 TOTAL 229677 MEAN 629 MAX 5100 MIN 105

e Estimated

02087500 NEUSE RIVER NEAR CLAYTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/12	0830	WATER	0	1.60	269	148	7.30	18.0	6.6	8.3	110
84/11/05	0840	WATER	0	1.66	307	150		17.0	3.3	8.0	130
84/12/03	0845	WATER	0	1.94	461	121	7.20	10.0	20.0	10.5	10000
85/01/10	1200	WATER	0	5.26	2460	55		5.0		10.6	90
85/02/14	0900	WATER	0	7.05	3800	51	7.10	5.0	33.0	12.2	150
85/03/21	1215	WATER	0	1.57	265	127	7.00	11.0		10.0	50
85/04/22	1230	WATER	0	1.70	311	175	7.50	22.0		7.4	50
85/05/23	1300	WATER	0	2.04	461	175	7.20	22.0	30.0	7.0	500
85/06/24	1210	WATER	0	1.84	373	161	7.10	24.0		6.7	30
85/07/22	1230	WATER	0	1.66	298	200	7.10	27.0		6.3	60
85/08/27	1300	WATER	0.1	2.10	518	122	7.20	23.0	35.0	7.4	690
85/09/11	1245	WATER	0.1	1.22	148	290	7.20	25.0		5.3	30

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/12	0830	WATER	0	41	13	180	.96	.040	.500	.760	.700
84/11/05	0840	WATER	0	53	8	150	1.40	.060	.400	.980	.900
84/12/03	0845	WATER	0	43	12	140	1.80	.090	.600	1.000	.920
85/01/10	1200	WATER	0		68	150	.46	.130	.500	.200	.060
85/02/14	0900	WATER	0	91	35	130	.42	.130	.500	.130	.030
85/03/21	1215	WATER	0	37	8	140	1.40	.250	.600	.630	.520
85/04/22	1230	WATER	0	110	18	160	1.10	.100	.400	.720	.640
85/05/23	1300	WATER	0	31	40	210	1.20	.130	.600	.820	.680
85/06/24	1210	WATER	0	28	27	160	.88	.060	.600	.720	.620
85/07/22	1230	WATER	0	41	17	300	.51	.120	.600	.660	.570
85/08/27	1300	WATER	0.1	33	46	160	.55	.170	.900	.540	.400
85/09/11	1245	WATER	0.1	53	5	210	1.20	.890	1.600	1.500	1.500

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/05	0840	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/14	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/23	1300	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/08/27	1300	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02087570 NEUSE RIVER AT SMITHFIELD, NC

LOCATION.--Lat 35°30'46", long 78°21'00", Johnston County, Hydrologic Unit 03020201, on left bank 10 ft downstream from bridge on U.S. Highway 70, at Smithfield, 2.1 mi upstream from Swift Creek, and 178 mi upstream from mouth.

DRAINAGE AREA.--1,206 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1959 to current year. Prior to October 1970 medium and high water discharges only. Gage height records at different datum collected at this site since July 1911 are contained in reports of the National Weather Service, NOAA, U.S. Department of Commerce.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 99.26 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 21, 1971, nonrecording gage on upstream side of bridge near center of span at same datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for municipal water supply for cities of Durham and Butner (station 02087183). Flow regulated by Falls Lake (station 02087182). The city of Raleigh diverted from Swift Creek (station 02087701), a downstream tributary, an average of 1.6 ft^3/s, and from Neuse River upstream from station an average of 43.9 ft^3/s, most of which was returned as sewage effluent upstream from station. The city of Smithfield diverted an average of 4.1 ft^3/s 0.2 mi upstream from station for municipal water supply, most of which was returned downstream as sewage effluent. Satellite data transmitter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--13 years, 1,359 ft^3/s, 15.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft^3/s Feb. 5, 1973, Mar. 21, 1975, gage height, 23.65 ft; minimum, 61 ft^3/s July 29, 1977, gage height, 2.47 ft; minimum gage height observed, 2.38 ft Sept. 26, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1908 reached a stage of 27.1 ft, discharge, 19,900 ft^3/s; July 24, 1919, 26.8 ft, discharge, 19,400 ft^3/s; Oct. 3, 1929, 26.4 ft, discharge, 18,700 ft^3/s; Sept. 20, 1945, 25.9 ft, discharge, 17,900 ft^3/s, from stage information provided by National Weather Service and U. S. Army Corps of Engineers, and discharges determined from ratings developed since 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,480 ft^3/s Feb. 13, gage height, 16.77 ft; minimum, 94 ft^3/s Sept. 19, gage height, 3.00 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	725	321	432	277	2020	3420	804	290	433	933	373	210
2	1080	318	329	270	4390	2660	736	286	431	943	560	172
3	634	320	559	502	4790	1040	558	304	417	616	549	157
4	519	313	899	1910	3150	762	490	509	408	313	309	150
5	420	334	547	2320	2290	680	366	384	410	480	343	138
6	358	371	882	1660	2550	528	312	321	492	442	319	136
7	392	332	918	1400	2400	414	336	303	480	343	325	142
8	399	325	552	1580	2510	487	358	285	437	339	326	139
9	421	324	433	2050	3090	594	352	275	430	308	331	133
10	409	317	387	2530	4070	770	292	283	415	312	350	132
11	371	321	361	2330	4530	699	254	288	412	399	321	135
12	317	373	342	1730	5360	450	253	292	380	462	299	134
13	307	358	324	1280	6310	452	273	502	507	381	306	108
14	304	337	318	1010	5320	482	360	405	489	330	326	122
15	301	324	312	830	5160	538	374	255	413	376	374	109
16	296	323	310	653	5090	586	366	312	436	345	317	112
17	300	325	303	612	4820	595	506	400	531	401	454	113
18	323	327	304	623	4520	601	346	356	492	362	593	136
19	340	333	307	628	4220	583	286	323	536	294	710	103
20	320	344	301	684	3990	480	267	296	555	306	480	129
21	312	347	297	645	3860	398	326	287	452	299	268	121
22	322	335	299	624	3710	397	323	334	419	309	427	121
23	382	335	299	624	3430	592	305	397	406	324	408	144
24	370	335	292	625	2070	548	228	423	390	372	355	153
25	337	336	282	632	974	523	215	314	391	526	345	139
26	326	346	272	632	1060	599	224	271	414	1210	635	137
27	322	356	265	610	2630	793	290	306	438	793	583	166
28	323	379	268	617	3370	872	293	297	439	515	469	163
29	325	556	273	607	---	867	294	285	442	797	393	147
30	320	543	277	517	---	839	302	277	677	625	426	135
31	319	---	275	643	---	823	---	298	---	418	414	---
TOTAL	12194	10508	12219	31655	101684	24072	10689	10158	13572	14873	12688	4136
MEAN	393	350	394	1021	3632	777	356	328	452	480	409	138
MAX	1080	556	918	2530	6310	3420	804	509	677	1210	710	210
MIN	296	313	265	270	974	397	215	255	380	294	268	103

CAL YR 1984 TOTAL 705868 MEAN 1929 MAX 8670 MIN 265
WTR YR 1985 TOTAL 258448 MEAN 708 MAX 6310 MIN 103

02087570 NEUSE RIVER AT SMITHFIELD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/18	0920	WATER	0	4.54	321	135	6.10	19.0		8.1	110
84/11/27	0920	WATER	0	4.53	356	115	7.40	7.0	4.6	11.0	90
84/12/11	0900	WATER	0	4.53	368	91		7.0		10.6	190
85/01/10	0840	WATER	0	10.87	2530	60		5.0		10.5	230
85/02/13	0900	WATER	0	16.70	6460	50	7.00	5.0	90.0	11.5	1000
85/03/21	0850	WATER	0	5.43	401	100	7.00	11.0		10.0	60
85/04/22	0915	WATER	0	4.61	328	172	7.30	19.0		7.4	760
85/05/23	0930	WATER	0	4.72	379	147	7.10	22.0	22.0	7.0	920
85/06/24	0900	WATER	0	4.72	396	200	7.20	22.0		6.2	690
85/07/22	0940	WATER	0	4.26	308	194	7.00	26.0		6.0	90
85/08/27	0950	WATER	0.2	5.36	579	105	7.00	23.0	50.0	7.0	500
85/09/11	0930	WATER	0.1	3.35	135	270	7.20	24.0		6.8	150

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/18	0920	WATER	0	38	12	140	1.10	.040	.400	.790	.730
84/11/27	0920	WATER	0	47	5	180	1.70	.070	.400	.760	.700
84/12/11	0900	WATER	0	33	19	140	.86	.170	.300	.450	.450
85/01/10	0840	WATER	0		49	140	.48	.110	.500	.220	.070
85/02/13	0900	WATER	0	85	110	200	.48	.100	.600	.210	.040
85/03/21	0850	WATER	0	31	10	120	1.20	.090	.500	.490	.370
85/04/22	0915	WATER	0	64	25	170	1.00	.100	.500	.680	.560
85/05/23	0930	WATER	0	26	36	170	1.20	.090	.500	.760	.600
85/06/24	0900	WATER	0	55	36	190	.71	.550	1.000	.740	.380
85/07/22	0940	WATER	0	36	23	150	.57	.080	.500	.530	.450
85/08/27	0950	WATER	0.2	31	67	170	.42	.070	.600	.350	.180
85/09/11	0930	WATER	0.1	51	10	200	1.20	.090	.700	.850	.850

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	0920	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/13	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/23	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	0950	WATER	0.2	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02088000 MIDDLE CREEK NEAR CLAYTON, NC

LOCATION.--Lat 35°34'10", long 78°35'30", Johnston County, Hydrologic Unit 03020201, on right bank 300 ft downstream from bridge on State Highway 50, 0.5 mi upstream from Buffalo Branch, 3.7 mi downstream from Wake-Johnston County line, and 9.5 mi southwest of Clayton.

DRAINAGE AREA.--83.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1303.

REVISED RECORDS.--WSP 952: 1940(M), 1941. WSP 1233: 1943(M), 1945, 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 184.53 ft above National Geodetic Vertical Datum of 1929. Nov. 1-20, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good above 5 ft^3/s and fair below except those for estimated daily discharges which are poor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 90.0 ft^3/s, 14.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,510 ft^3/s Feb. 3, 1973, gage height, 13.42 ft, result of dam failure; no flow Oct. 11-13, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	1530	*538	*6.11				

Minimum daily discharge, 0.90 ft^3/s Sept. 25, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	18	23	23	257	86	41	12	3.8	8.0	26	9.1
2	33	20	14	23	388	79	38	8.7	3.4	34	93	7.4
3	31	15	58	89	511	72	34	10	2.9	36	48	6.0
4	23	14	57	258	382	66	34	18	3.5	19	26	4.6
5	18	18	35	271	164	65	32	18	3.4	11	16	3.9
6	16	19	97	130	262	62	32	15	9.1	7.5	12	3.4
7	13	16	73	81	245	54	30	12	8.8	8.9	9.6	2.9
8	14	14	38	64	155	54	27	9.7	6.9	6.4	8.4	2.6
9	12	12	29	53	114	56	26	10	6.2	5.2	7.7	2.4
10	10	11	25	48	97	53	24	9.9	5.5	3.8	7.2	2.2
11	11	12	25	47	88	52	24	10	4.4	4.3	6.1	1.9
12	11	17	25	46	277	51	25	17	5.2	10	5.3	1.9
13	9.5	21	25	42	413	53	25	20	5.9	8.3	5.0	2.0
14	8.9	14	25	41	223	46	27	20	5.4	6.0	4.3	2.7
15	7.2	14	27	39	133	45	31	14	5.7	4.5	3.9	2.5
16	6.5	13	27	36	109	42	41	15	12	3.6	3.9	2.2
17	7.2	13	28	42	95	43	75	22	57	3.4	4.1	1.7
18	8.1	13	28	68	85	44	45	18	77	2.9	22	1.5
19	9.7	13	27	63	81	40	34	13	47	2.5	24	1.4
20	9.7	14	27	52	86	38	29	9.5	21	2.6	13	1.3
21	12	15	28	42	89	38	24	7.8	11	2.3	10	e1.1
22	9.5	14	28	38	78	83	21	16	7.1	2.4	9.4	e1.0
23	17	15	29	36	74	158	18	17	4.6	2.7	8.7	e1.0
24	14	15	27	37	72	100	15	14	3.6	2.8	8.4	e.94
25	14	15	25	39	70	86	14	13	3.0	19	7.6	e.90
26	14	16	25	39	135	74	13	11	2.6	32	63	e1.0
27	13	16	24	41	178	63	12	9.0	2.3	31	42	e.98
28	15	19	23	39	112	56	11	7.1	2.0	42	29	e.96
29	20	36	23	44	---	52	11	5.5	2.1	70	19	e.92
30	22	29	24	48	---	48	10	4.5	3.4	101	13	e.90
31	19	---	24	92	---	45	---	4.1	---	35	11	---
TOTAL	455.3	491	993	2011	4973	1904	823	390.8	335.8	528.1	566.6	73.30
MEAN	14.7	16.4	32.0	64.9	178	61.4	27.4	12.6	11.2	17.0	18.3	2.44
MAX	33	36	97	271	511	158	75	22	77	101	93	9.1
MIN	6.5	11	14	23	70	38	10	4.1	2.0	2.3	3.9	.90
CFSM	.18	.20	.38	.78	2.13	.74	.33	.15	.13	.20	.22	.03
IN.	.20	.22	.44	.90	2.22	.85	.37	.17	.15	.24	.25	.03

CAL YR 1984 TOTAL 40378.4 MEAN 110 MAX 1490 MIN 3.0 CFSM 1.32 IN. 17.99
WTR YR 1985 TOTAL 13544.90 MEAN 37.1 MAX 511 MIN .90 CFSM .44 IN. 6.03

e Estimated

02088000 MIDDLE CREEK NEAR CLAYTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/18	0845	WATER	0	1.62	8	65	6.00	19.0		7.2	70
84/11/27	0830	WATER	0	1.82	15	50	7.60	6.0	6.0	10.0	130
84/12/11	0815	WATER	0	1.86	25	48	7.80	6.0		10.4	150
85/01/10	0800	WATER	0	2.01	48	45	7.70	4.0		10.8	330
85/02/13	0815	WATER	0	5.36	421	35	6.90	4.0	95.0	10.6	1100
85/03/21	0815	WATER	0	1.86	35	48	7.00	11.0		10.4	40
85/04/22	0835	WATER	0	1.64	21	71	7.20	19.0		7.8	100
85/05/23	0850	WATER	0	1.63	18	65	7.00	22.0	16.0	7.2	190
85/06/24	0820	WATER	0	1.30	3		7.00	22.0		6.6	100
85/07/22	1200	WATER	0	1.26	2	80	6.90	26.0		5.6	100
85/08/27	0900	WATER	0.1	1.97	43	56	6.90	23.0	40.0	7.8	900
85/09/11	0900	WATER	0.1	1.22	2	87	7.10	24.0		6.3	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/18	0845	WATER	0	26	9	81					
84/11/27	0830	WATER	0	36	2	110	.14	.100	.300	.070	.030
84/12/11	0815	WATER	0	31	5	76					
85/01/10	0800	WATER	0	23	6	91	.29	.090	.400	.070	.010
85/02/13	0815	WATER	0	47	52	140	.42	.110	.500	.160	.020
85/03/21	0815	WATER	0	26	4	68	.12	.030	.300	.070	.010K
85/04/22	0835	WATER	0	34	8	86	.36	.150	.400	.120	.020
85/05/23	0850	WATER	0	26	16	100	.26	.090	.400	.120	.010
85/06/24	0820	WATER	0	30	8	87	.21	.070	.400	.110	.010
85/07/22	1200	WATER	0	34	5	73	.20	.060	.400	.120	.010
85/08/27	0900	WATER	0.1	20	31	120	.29	.120	.600	.120	.020
85/09/11	0900	WATER	0.1	34	2	91	.31	.190	.500	.080	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/13	0815	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/23	0850	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	0900	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02088470 LITTLE RIVER NEAR KENLY, NC

LOCATION.--Lat 35°35'20", long 78°11'18", Johnston County, Hydrologic Unit 03020201, near left bank on downstream side of bridge on Secondary Road 1934, 0.7 mi downstream from Buffalo Creek, and 3.7 mi west of Kenly.

DRAINAGE AREA.--191 mi^2.

PERIOD OF RECORD.--July 1964 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 129.24 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those below 10 ft^3/s, which are fair. Some diurnal fluctuation and some regulation during periods of low flow caused by mill 10 mi upstream.

AVERAGE DISCHARGE.--21 years, 189 ft^3/s, 13.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,030 ft^3/s Oct. 6, 1964, gage height, 16.30 ft; minimum, 0.18 ft^3/s Oct. 4, 5, 6, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	1030	*958	*11.07				

Minimum discharge, 2.8 ft^3/s Sept. 25, gage height, 2.83 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	31	59	54	470	297	108	33	15	10	185	28
2	59	32	55	55	676	267	96	31	13	21	151	25
3	65	29	109	126	835	215	88	31	12	120	180	21
4	57	28	149	390	872	180	83	41	10	111	138	19
5	46	34	136	533	867	160	77	43	9.1	67	93	17
6	38	34	179	459	839	149	75	42	16	47	62	16
7	35	31	178	344	736	133	73	41	17	32	48	15
8	36	29	140	276	579	126	68	34	11	25	41	14
9	39	27	132	203	458	124	63	29	9.7	21	37	12
10	37	28	121	158	367	120	60	26	8.4	19	34	10
11	35	31	107	141	299	114	58	26	7.6	25	30	9.8
12	35	32	95	138	632	112	57	32	6.7	18	27	8.9
13	33	33	86	126	941	107	56	34	6.0	14	23	7.9
14	30	31	81	116	853	101	58	33	6.7	18	21	6.3
15	29	29	78	115	705	96	63	32	9.9	64	18	5.2
16	28	28	75	105	567	92	67	32	12	20	16	4.6
17	28	27	73	114	405	91	163	32	14	34	18	13
18	28	28	73	180	295	91	286	30	38	37	36	25
19	30	28	71	166	248	86	186	28	91	24	142	22
20	29	32	70	140	237	81	99	25	60	17	94	16
21	30	34	70	132	239	78	75	22	30	14	66	7.8
22	30	32	70	e120	211	124	62	22	20	12	51	4.3
23	34	31	69	e110	194	259	53	25	17	9.3	48	3.8
24	33	30	67	e104	180	259	46	30	14	8.1	40	3.8
25	34	30	67	99	169	230	42	32	12	17	40	3.2
26	34	30	64	101	233	221	42	31	10	360	37	3.9
27	32	29	62	91	314	200	38	29	7.4	554	97	7.4
28	32	32	58	103	303	196	35	27	5.7	557	79	11
29	35	55	57	111	---	167	33	22	4.5	542	51	13
30	36	65	56	120	---	136	32	19	5.0	507	39	15
31	33	---	55	212	---	119	---	17	---	282	32	---
TOTAL	1123	970	2762	5242	13724	4731	2342	931	498.7	3606.4	1974	368.9
MEAN	36.2	32.3	89.1	169	490	153	78.1	30.0	16.6	116	63.7	12.3
MAX	65	65	179	533	941	297	286	43	91	557	185	28
MIN	28	27	55	54	169	78	32	17	4.5	8.1	16	3.2
CFSM	.19	.17	.47	.88	2.57	.80	.41	.16	.09	.61	.33	.06
IN.	.22	.19	.54	1.02	2.67	.92	.46	.18	.10	.70	.38	.07

CAL YR 1984 TOTAL 104819 MEAN 286 MAX 2060 MIN 15 CFSM 1.50 IN. 20.42
WTR YR 1985 TOTAL 38273.0 MEAN 105 MAX 941 MIN 3.2 CFSM .55 IN. 7.45

e Estimated

02088500 LITTLE RIVER NEAR PRINCETON, NC

LOCATION.--Lat 35°30'40", long 78°09'38", Johnston County, Hydrologic Unit 03020201, on left bank 600 ft downstream from bridge on Secondary Road 2320, 0.8 mi upstream from Little Creek, and 3 mi north of Princeton.

DRAINAGE AREA.--232 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORD.--WSP 1233: 1935(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 107.75 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 17, 1934, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good except those below 10 ft^3/s which are fair. Slight diurnal fluctuation and occasional regulation for short periods, caused by mills above station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--55 years, 252 ft^3/s, 14.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,150 ft^3/s Oct. 6, 1964, gage height, 13.94 ft; minimum, 0.95 ft^3/s Sept. 3, 4, 5, 1980, gage height, 0.86 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1919 reached a stage of 14.57 ft; September 1924, 14.90 ft; September 1928, 13.3 ft; October 1929, 13.47 ft; from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 13	1800	*1,420	*8.67	No other peak greater than base discharge.			

Minimum discharge 1.3 ft^3/s June 29, gage height, 0.98 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	36	91	65	593	332	112	34	16	10	266	36
2	95	35	67	66	909	314	102	35	11	14	224	30
3	90	34	101	109	1150	250	93	35	7.3	78	227	25
4	82	30	169	522	1120	205	88	40	5.6	140	182	20
5	71	35	144	782	1070	184	83	54	3.8	97	123	16
6	58	44	195	703	1170	169	80	54	16	75	87	13
7	50	39	219	492	1090	149	79	53	32	54	67	10
8	44	34	161	365	844	139	74	46	29	39	57	9.1
9	51	32	130	261	627	135	69	36	14	30	55	7.0
10	49	30	120	199	492	132	66	32	9.2	25	48	6.3
11	44	31	108	179	381	125	65	28	7.3	32	41	8.2
12	41	35	95	171	874	122	63	35	5.9	34	33	18
13	40	36	85	156	1360	118	63	40	7.9	18	27	27
14	35	37	80	144	1270	112	65	42	6.9	12	22	26
15	32	34	77	138	973	107	71	41	6.7	58	18	16
16	29	32	74	129	769	102	77	41	19	43	15	12
17	28	30	73	134	570	100	120	44	30	29	18	9.9
18	29	29	72	218	394	100	270	39	35	50	35	30
19	30	32	72	224	311	96	246	37	95	42	151	35
20	31	40	71	185	290	91	118	32	102	25	137	26
21	31	44	72	143	298	88	88	28	58	15	94	15
22	32	45	73	124	263	121	74	27	38	10	73	7.3
23	33	43	73	118	235	288	64	29	26	7.2	67	4.7
24	35	41	71	111	220	306	57	37	20	5.1	58	4.1
25	42	40	70	118	207	254	52	46	15	27	48	3.6
26	36	40	70	123	231	232	47	53	9.6	207	62	3.9
27	35	39	68	112	362	204	48	48	7.4	608	78	18
28	35	42	68	115	357	195	42	45	3.4	650	110	9.9
29	36	84	67	128	---	178	37	40	1.8	609	75	8.3
30	41	93	66	138	---	143	34	30	5.4	642	63	11
31	40	---	65	222	---	123	---	21	---	388	45	---
TOTAL	1389	1196	2967	6694	18430	5214	2547	1202	644.2	4073.3	2606	466.3
MEAN	44.8	39.9	95.7	216	658	168	84.9	38.8	21.5	131	84.1	15.5
MAX	95	93	219	782	1360	332	270	54	102	650	266	36
MIN	28	29	65	65	207	88	34	21	1.8	5.1	15	3.6
CFSM	.19	.17	.41	.93	2.84	.72	.37	.17	.09	.56	.36	.07
IN.	.22	.19	.48	1.07	2.96	.84	.41	.19	.10	.65	.42	.07

CAL YR 1984 TOTAL 135100 MEAN 369 MAX 3390 MIN 17 CFSM 1.59 IN. 21.66
WTR YR 1985 TOTAL 47428.8 MEAN 130 MAX 1360 MIN 1.8 CFSM .56 IN. 7.60

NEUSE RIVER BASIN

02088500 LITTLE RIVER NEAR PRINCETON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/18	1045	WATER	0	1.52	31	60	6.00	19.0		8.2	10
84/11/27	1100	WATER	0	1.58	22	52		7.0	4.0	11.2	80
84/12/11	1030	WATER	0	2.18	108	48		7.0		11.8	60
85/01/10	0950	WATER	0	2.55	202	35		4.0		11.4	130
85/02/13	1030	WATER	0	8.51	1380	330	6.90	4.0	90.0	11.4	1200
85/03/21	1000	WATER	0	1.93	88	48	7.00	11.0		10.6	20
85/04/22	1010	WATER	0	1.85	76	62	7.30	21.0		7.8	10K
85/05/23	1045	WATER	0	1.48	29	69	7.00	22.0	3.9	6.1	10K
85/06/24	1000	WATER	0	1.35	16	65	6.80	23.0		5.8	50
85/07/22	1040	WATER	0	1.21	6	65	6.90	25.0		5.0	60
85/08/27	1100	WATER	0.1	1.70	58	64	6.90	23.0	8.5	7.5	30
85/09/11	1050	WATER	0.1	1.13	1	75	7.00	24.0		5.8	50

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/18	1045	WATER	0	21	4	84	.34	.010	.400	.120	.050
84/11/27	1100	WATER	0	36	2	130	.28	.010	.200	.120	.050
84/12/11	1030	WATER	0	21	3	78	.29	.060	.500	.110	.040
85/01/10	0950	WATER	0		10	91	.49	.050	.300	.100	.020
85/02/13	1030	WATER	0	29	50	140	.48	.070	.500	.190	.030
85/03/21	1000	WATER	0	23	1	79	.30	.010	.200	.090	.020
85/04/22	1010	WATER	0	58	3	90	.46	.090	.500	.160	.050
85/05/23	1045	WATER	0	23	4	84	.43	.030	.400	.160	.060
85/06/24	1000	WATER	0	20	4	100	.54	.090	.400	.220	.080
85/07/22	1040	WATER	0	15	1	200	.38	.050	.400	.210	.080
85/08/27	1100	WATER	0.1	20	5	95	.50	.040		.070	.470
85/09/11	1050	WATER	0.1	25	3	95	.37	.040	.500	.210	.090

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/13	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/23	1045	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	1100	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02089000 NEUSE RIVER NEAR GOLDSBORO, NC

LOCATION.--Lat 35°20'14", long 77°59'51", Wayne County, Hydrologic Unit 03020202, on left bank at downstream side of bridge on Secondary Road 1915, 0.2 mi upstream from Stony Creek, 1.5 mi downstream from Seaboard Coast Line Railroad bridge, 3.2 mi south of Wayne County courthouse in Goldsboro, 4.3 mi downstream from Little River, and 135 mi upstream from mouth.

DRAINAGE AREA.--2,399 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to current year.

REVISED RECORDS.--WSP 1333: 1931, 1935. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 42.95 ft above National Geodetic Vertical Datum of 1929. Prior to July 24, 1931, nonrecording gage at railroad bridge, 1.5 mi upstream at datum 2.00 ft higher. July 24, 1931 to Aug. 31, 1948, water-stage recorder at site 2.3 mi upstream at datum 1.71 ft higher than present datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Falls Lake (station 02087182). Diversions for municipal water supply for cities of Durham and Butner (station 02087183). National Weather Service gage height telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--55 years, 2,509 ft³/s, 14.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,700 ft³/s Sept. 23, 1945; maximum gage height, 26.72 ft Sept. 23, 1945, site and datum then in use; minimum discharge, 76 ft³/s Sept. 26, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 1866 and July 1919, reached stages of about 29 ft and 28 ft, respectively, at site 2.3 mi upstream at present datum, from flood profiles of U. S. Army Corps of Engineers. Flood of Oct. 5, 1929, reached a stage of 27.3 ft at railroad bridge at present datum, discharge, 38,600 ft³/s.

EXTREMES FOR CURRENT YEAR.-- Maximum discharge, 8,670 ft³/s Feb. 17, gage height, 17.33 ft; minimum, 157 ft³/s Sept. 19, gage height, 2.19 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	749	1000	580	1800	4050	1620	541	404	612	1930	650
2	1360	720	979	561	3510	4270	1540	529	443	862	1470	531
3	1840	686	908	643	4550	4480	1410	535	532	1020	1390	382
4	1710	649	917	1540	5280	4010	1200	536	532	927	1600	327
5	1430	672	1490	3440	5900	2730	1070	593	520	710	1260	296
6	1220	647	1540	4560	6880	2200	909	697	523	626	942	272
7	1020	656	1570	4990	7530	1830	818	602	527	641	768	234
8	924	662	1950	4850	7810	1610	822	541	596	556	688	232
9	877	641	1720	4090	7790	1630	842	517	571	471	677	246
10	859	616	1390	3610	7430	1710	812	495	550	438	939	230
11	838	597	1210	3600	6740	1880	738	479	531	516	657	222
12	786	579	1100	3640	6600	1800	680	492	513	438	642	215
13	721	589	1000	3380	6900	1430	671	506	494	506	573	207
14	663	625	888	2750	7400	1320	699	526	483	561	511	197
15	635	588	832	2090	8030	1290	747	707	563	490	480	179
16	616	567	796	1780	8500	1330	913	606	543	426	489	177
17	602	549	771	1530	8660	1370	1120	513	502	541	570	169
18	592	544	755	1480	8500	1330	1320	568	542	477	535	165
19	592	546	734	1570	8090	1320	1540	599	634	484	830	165
20	631	533	713	1670	7630	1270	1340	569	729	437	963	177
21	665	545	707	1660	7210	1130	1080	528	811	391	1070	171
22	664	555	697	1490	6840	1120	923	485	733	384	818	193
23	657	562	688	1320	6500	1370	851	471	608	373	640	203
24	685	560	679	1280	6150	2030	769	510	552	397	683	179
25	734	558	681	1270	5810	2300	674	588	513	487	624	186
26	728	550	654	1270	4850	2110	576	571	489	564	589	206
27	711	561	638	1270	3500	2040	524	471	473	1270	585	348
28	696	597	613	1230	3710	2090	530	446	495	1770	842	217
29	687	687	596	1260	---	2000	558	454	505	1840	852	212
30	687	784	578	1300	---	1860	553	435	530	1920	739	207
31	729	---	586	1440	---	1720	---	422	---	2140	649	---
TOTAL	26649	18374	29380	67144	180100	62630	27849	16532	16441	23275	25905	7395
MEAN	860	612	948	2166	6432	2020	928	533	548	751	836	247
MAX	1840	784	1950	4990	8660	4480	1620	707	811	2140	1930	650
MIN	592	533	578	561	1800	1120	524	422	404	373	480	165
CFSM	.36	.26	.40	.30	2.68	.84	.39	.22	.23	.31	.35	.10
IN.	.41	.28	.46	1.04	2.79	.97	.43	.26	.25	.36	.40	.11

CAL YR 1984 TOTAL 1297029 MEAN 3544 MAX 9940 MIN 533 CFSM 1.48 IN. 20.11
WTR YR 1985 TOTAL 501674 MEAN 1374 MAX 8660 MIN 165 CFSM .57 IN. 7.78

02089000 NEUSE RIVER NEAR GOLDSBORO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	1230	WATER	0	3.89	736	130	7.10	21.0	16.0	6.5	80
84/11/28	1230	WATER	0	3.60	576	120	7.30	9.0		9.6	90
84/12/12	1215	WATER	0	4.92	1100	83	7.20	6.0		11.2	50
85/01/16	1400	WATER	0	6.51	1770		7.20	3.0	22.0	11.7	130
85/02/11	1320	WATER	0	14.92	6700	71	7.00	3.0		11.8	70
85/03/26	1300	WATER	0	6.91	2100	77	7.40	11.0		9.5	140
85/04/15	1340	WATER	0	3.88	752	116	7.30	17.0	16.0	8.3	20
85/05/23	1330	WATER	0	3.12	469			27.0		7.0	20
85/06/27	1245	WATER	0	3.09	476	147	7.10	26.0		8.8	10
85/07/18	1350	WATER	0	3.04	453	188	7.20	28.0	15.0	6.5	10K
85/08/20	1250	WATER	0.1	4.34	958	154		27.0		6.0	60
85/09/23	1410	WATER	0.1	2.35	196	218	7.80	23.0		9.1	31000

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	1230	WATER	0	35	15	150	.64	.070	.400	.360	.220
84/11/28	1230	WATER	0	40	8	140					
84/12/12	1215	WATER	0	21	16	130					
85/01/16	1400	WATER	0	20	23	120	.67	.100	.400	.160	.060
85/02/11	1320	WATER	0	15	22	110	.61	.050	.400	.110	.010
85/03/26	1300	WATER	0	18	28	110	.55	.060	.400	.160	.050
85/04/15	1340	WATER	0	23	13	120	1.00	.080	.500	.290	.140
85/05/23	1330	WATER	0		14	130	.93	.080	.300	.340	.220
85/06/27	1245	WATER	0	25	16	140	.67	.060	.400	.400	.290
85/07/18	1350	WATER	0	28	8	120	.69	.110	.400	.330	.250
85/08/20	1250	WATER	0.1		26	170					
85/09/23	1410	WATER	0.1	48	8	170	1.10	.080	.500	.280	.180

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/25	1230	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/16	1400	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/04/15	1340	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/18	1350	WATER	0		20K	50K	120	100K	.2K	100K	20K

K Less than noted value.

02089500 NEUSE RIVER AT KINSTON, NC
(National stream-quality accounting network station)

LOCATION.--Lat 35°15'29", long 77°35'09", Lenoir County, Hydrologic Unit 03020202, on left bank at Kinston, 600 ft downstream from bridge on State Highway 11, and 90 mi upstream from mouth.

DRAINAGE AREA.--2,692 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to current year.

REVISED RECORDS.--WSP 1333: 1931-32. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 10.90 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1934, nonrecording gage at highway bridge 1 mi downstream at datum 0.80 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Falls Lake (station 02087182). Diversions for municipal water supply for cities of Durham and Butner (station 02087183).

AVERAGE DISCHARGE.--55 years, 2,881 ft³/s, 14.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,000 ft³/s Oct. 13, 1964; maximum gage height, 22.86 ft Oct. 13, 1964; minimum discharge, 124 ft³/s Sept. 26, 1932, gage height, 1.29 ft, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1919 reached a stage of 25.0 ft, present site and datum, discharge, about 39,000 ft³/s, from information provided by North Carolina State Highway Commission. Flood in October 1924 reached a stage of 24.7 ft, present site and datum, discharge, 36,000 ft³/s, from information provided by North Carolina State Highway Commission. Flood of Sept. 25-26, 1928, reached a stage of 24.2 ft, present site and datum, discharge, 34,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,040 ft³/s Feb. 20, gage height 15.44 ft; minimum, 196 ft³/s Sept. 20, gage height, 2.31 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	1110	1130	965	2330	5190	2150	791	627	648	2190	770
2	1740	1120	1280	962	2710	4690	2010	785	609	711	2200	726
3	1850	1080	1380	988	3450	4620	1910	781	601	841	1870	677
4	2150	1060	1360	1210	4140	4720	1790	795	669	1070	1580	548
5	2220	1080	1330	2110	4730	4830	1610	800	694	1110	1650	452
6	1990	1100	1760	3130	5690	4540	1450	804	696	936	1510	399
7	1740	1040	2000	3620	6530	3640	1310	909	693	771	1200	361
8	1540	1010	1990	4170	7250	2750	1180	876	695	742	1030	323
9	1390	1020	2210	4600	7730	2280	1140	803	726	698	948	293
10	1310	998	2190	4830	8030	2150	1150	774	742	611	888	291
11	1280	974	1940	4670	8150	2170	1130	754	708	620	966	279
12	1240	948	1710	4380	8650	2260	1080	742	684	661	867	266
13	1190	921	1560	4210	8690	2260	1010	745	658	635	778	255
14	1120	910	1450	4100	8400	2000	1000	759	641	780	719	249
15	1060	938	1330	3830	8100	1790	1040	752	620	864	655	243
16	1010	928	1250	3220	7990	1720	1060	872	665	715	608	232
17	988	897	1210	2720	8160	1740	1170	892	694	590	605	218
18	974	877	1170	2460	8500	1790	1380	783	654	611	858	211
19	961	868	1150	2320	8830	1740	1490	771	646	620	1580	203
20	953	871	1130	2300	9000	1710	1700	820	711	566	1340	200
21	964	863	1110	2350	8900	1670	1630	808	779	554	1190	206
22	985	856	1100	2340	8550	1660	1410	775	881	507	1280	228
23	986	872	1080	2220	8130	1780	1230	743	876	502	1120	233
24	981	888	1070	2060	7740	1900	1140	717	768	517	887	261
25	986	893	1060	1980	7360	2270	1060	718	684	655	830	242
26	1030	890	1050	1950	7010	2600	975	778	640	707	795	284
27	1040	883	1040	1930	6710	2580	874	798	604	719	734	599
28	1030	906	1020	1930	6150	2470	808	721	581	1190	689	651
29	1050	977	1010	1940	---	2460	775	659	580	1810	843	463
30	1180	1080	986	1950	---	2420	793	652	606	2040	935	355
31	1150	---	971	2080	---	2290	---	643	---	2050	874	---
TOTAL	39778	28858	42027	83525	197610	82690	38455	24020	20432	26051	34219	10718
MEAN	1283	962	1356	2694	7058	2667	1282	775	681	840	1104	357
MAX	2220	1120	2210	4830	9000	5190	2150	909	881	2050	2200	770
MIN	953	856	971	962	2330	1660	775	643	580	502	605	200
CFSM	.48	.36	.50	1.00	2.62	.99	.48	.29	.25	.31	.41	.13
IN.	.55	.40	.58	1.15	2.73	1.14	.53	.33	.28	.36	.47	.15

CAL YR 1984 TOTAL 1494628 MEAN 4084 MAX 10800 MIN 848 CFSM 1.52 IN. 20.65
WTR YR 1985 TOTAL 628383 MEAN 1722 MAX 9000 MIN 200 CFSM .64 IN. 8.68

02089500 NEUSE RIVER AT KINSTON, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950, 1955-56, 1959-67, 1973 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1973 to current year.
WATER TEMPERATURE: October 1949 to September 1950, January 1955 to September 1956, July 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1981.

REMARKS.--Station operated as part of NASQAN network from October 1974 to present. Daily records of specific conductance for January 1955 to September 1956 are available in the files of the district office in Raleigh, NC. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemical and biological data shown in last table were provided by the Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 242 microsiemens Sept. 21, 1983; minimum daily, 43 microsiemens Mar. 28, 1975.
WATER TEMPERATURE: Maximum recorded, 34.0°C Aug. 23, 1983, Sept. 8, 1985; minimum daily, 0.0°C Feb. 7, 1978, Jan. 13, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 212 microsiemens Sept. 22; minimum recorded, 65 microsiemens Jan. 13.
WATER TEMPERATURE: Maximum recorded, 34.0°C Sept. 8; minimum recorded, 1.0°C Jan. 22,23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV												
07...	0940	841	120	5.9	15.0	7.3	771	8.1	79	100	140	26
JAN												
07...	1010	3360	95	6.0	7.0	28	756	10.4	86	1800	3500	19
MAR												
20...	1045	1540	112	6.5	12.0	6.0	769	11.9	109	K76	80	23
MAY												
13...	1045	451	136	6.4	24.0	6.0	761	6.8	81	140	92	25
JUL												
10...	1005	415	115	6.3	28.5	5.3	758	6.6	86	K44	K68	24
SEP												
05...	1015	400	140	6.1	28.0	4.5	764	5.5	70	250	840	28

K Results based on colony count outside the acceptable range (non-ideal colony count).

02089500 NEUSE RIVER AT KINSTON, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV 07...	4	6.3	2.4	11	45	1	3.3	9.4	11	.10	11	81
JAN 07...	3	4.7	1.8	8.1	43	.8	3.0	9.9	11	.10	8.9	70
MAR 20...	5	5.6	2.1	11	48	1	2.6	14	10	.10	7.3	73
MAY 13...	2	5.9	2.4	15	53	1	3.2	16	12	.20	10	91
JUL 10...	0	5.8	2.3	12	48	1	3.6	12	13	.30	9.9	75
SEP 05...	0	7.0	2.6	15	50	1	3.4	17	12	.10	9.4	95

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
NOV 07...	70	.11	184	.76	.080	.10	.70	.270	.260	.200	.61
JAN 07...	58	.10	635	.73	<.010	--	.70	.170	--	.180	.55
MAR 20...	65	.10	303	1.1	.290	.37	.70	.230	.220	.220	.67
MAY 13...	80	.12	111	1.2	.110	.14	.70	.230	.240	.200	.61
JUL 10...	74	.10	84	.71	.030	.04	.30	.300	.250	.270	.83
SEP 05...	89	.13	103	.65	.160	.21	.80	.280	.250	.240	.74

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
NOV 07...	90	<1	31	<.5	<1	2	<3	2	810	2	<4
JAN 07...	70	<1	27	.5	<1	<1	<3	2	310	1	<4
MAR 20...	--	--	--	--	--	--	--	--	--	--	--
MAY 13...	60	<1	29	<.5	<1	3	<3	5	490	1	<4
JUL 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 05...	50	1	28	<.5	<1	1	<3	4	410	2	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 07...	34	1.8	<10	1	<1	1	46	<6	13	13	30	94
JAN 07...	27	1.0	<10	1	<1	<1	33	<6	8	49	445	94
MAR 20...	--	--	--	--	--	--	--	--	--	23	96	87
MAY 13...	33	<.1	<10	3	<1	<1	48	<6	31	27	33	69
JUL 10...	--	--	--	--	--	--	--	--	--	22	25	96
SEP 05...	47	.3	<10	3	<1	<1	56	<6	8	12	13	94

NEUSE RIVER BASIN

02089500 NEUSE RIVER AT KINSTON, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	105	104	105	123	116	120				---	---	---
2	108	104	107	128	123	125				---	---	---
3	111	108	109	130	127	128				---	---	---
4	111	109	110	128	123	127				---	---	---
5	111	103	108	127	124	126				---	---	---
6	102	95	97	123	119	121				---	---	---
7	97	94	96	122	115	115				96	92	95
8	103	97	100	125	116	121				91	89	90
9	104	102	103	128	126	127				89	86	88
10	108	104	106	128	126	127				86	85	86
11	112	108	109	---	---	---				87	86	86
12	118	112	115	---	---	---				91	87	89
13	121	117	119	---	---	---				90	65	89
14	121	118	119	---	---	---				91	90	90
15	118	115	116	---	---	---				92	90	91
16	116	114	115	---	---	---				93	91	92
17	116	114	115	---	---	---				94	91	93
18	118	115	116	---	---	---				94	93	93
19	123	118	120	---	---	---				95	93	94
20	123	119	122	---	---	---				95	94	95
21	124	121	122	---	---	---				97	95	96
22	126	124	125	---	---	---				100	96	98
23	126	122	123	---	---	---				103	99	101
24	122	120	121	---	---	---				104	102	104
25	128	121	124	---	---	---				103	100	102
26	133	128	130	---	---	---				102	100	101
27	134	133	134	---	---	---				103	100	102
28	134	130	132	---	---	---				104	102	104
29	131	122	126	---	---	---				107	104	106
30	122	112	117	---	---	---				108	106	107
31	114	108	111	---	---	---				108	104	106
MONTH	134	94	115	130	115	124				108	65	96

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	106	99	103	84	80	82	93	92	92	121	120	121
2	99	94	96	84	80	83	97	92	93	126	121	124
3	98	94	96	80	77	79	96	95	95	135	125	129
4	100	90	97	78	78	78	97	94	95	146	136	142
5	89	81	84	78	77	78	98	97	97	148	143	146
6	80	77	78	81	78	79	98	94	96	144	139	141
7	77	74	76	86	81	85	97	94	96	141	133	137
8	74	73	74	87	87	87	97	94	96	135	131	133
9	75	74	74	88	86	87	102	97	100	144	135	141
10	75	75	75	88	86	86	105	100	101	144	138	142
11	76	75	75	94	88	91	112	107	109	139	134	136
12	76	74	75	106	95	100	116	112	114	138	134	136
13	78	76	77	107	97	101	123	116	119	139	136	137
14	79	78	78	97	94	95	125	115	121	141	138	139
15	78	76	77	94	87	90	114	108	111	138	130	133
16	76	73	74	89	87	88	109	107	108	139	129	132
17	73	71	72	95	90	92	113	108	111	148	140	144
18	71	71	71	94	93	93	114	104	110	151	148	150
19	73	71	72	106	95	102	124	106	118	151	142	148
20	74	72	73	105	99	102	124	109	117	140	129	134
21	75	74	75	103	100	101	108	97	104	129	127	128
22	77	75	76	102	100	101	96	92	93	131	127	129
23	77	77	77	99	93	95	99	94	97	147	132	140
24	78	77	78	93	90	91	105	100	102	147	139	144
25	78	78	78	94	91	93	111	105	108	141	137	139
26	78	78	78	96	92	94	125	112	116	145	139	141
27	78	77	78	93	89	92	125	122	124	153	145	148
28	80	76	79	89	88	88	128	125	127	158	152	155
29	---	---	---	94	89	92	130	127	129	156	147	151
30	---	---	---	98	93	97	128	122	124	151	147	149
31	---	---	---	97	92	94	---	---	---	150	146	148
MONTH	106	71	79	107	77	91	130	92	107	158	120	139

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	151	148	150	147	144	146	---	---	---	---	---	---
2	155	150	152	142	127	134	---	---	---	---	---	---
3	160	155	158	139	129	135	---	---	---	---	---	---
4	168	159	164	145	129	141	---	---	---	---	---	---
5	161	151	155	140	109	125	---	---	---	144	141	143
6	151	147	149	111	108	110	---	---	---	147	142	144
7	166	149	159	110	107	109	---	---	---	147	135	142
8	176	166	171	113	109	111	122	112	119	134	131	132
9	174	167	170	114	112	113	127	120	123	135	131	133
10	165	159	161	123	113	117	139	123	130	138	134	136
11	160	157	158	128	116	124	139	126	131	147	138	141
12	171	159	166	120	118	119	186	110	123	153	147	148
13	171	165	167	117	86	111	137	117	128	156	150	152
14	172	166	168	111	66	101	155	132	141	166	156	160
15	174	141	152	118	107	112	158	148	154	171	166	167
16	142	139	141	127	118	124	160	149	155	173	169	171
17	140	130	136	129	115	121	157	146	152	178	171	174
18	132	128	128	143	130	138	152	85	136	182	178	179
19	143	132	140	142	140	141	---	---	---	182	176	179
20	146	142	145	140	135	136	---	---	---	187	180	183
21	147	143	145	144	135	140	---	---	---	198	188	193
22	146	139	142	145	142	144	---	---	---	212	187	198
23	139	118	131	145	141	143	---	---	---	204	199	201
24	118	107	112	143	135	141	---	---	---	201	194	197
25	126	107	115	151	107	130	---	---	---	199	196	198
26	133	126	130	---	---	---	---	---	---	198	101	178
27	136	132	134	---	---	---	---	---	---	159	91	145
28	142	136	140	---	---	---	---	---	---	175	156	163
29	146	142	144	---	---	---	---	---	---	180	169	176
30	146	141	145	---	---	---	---	---	---	167	151	159
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	176	107	148	151	66	127	186	85	136	212	91	165
YEAR	212	65	119									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.0	17.5	17.5	21.5	20.5	21.0				---	---	---
2	18.0	17.5	17.5	21.5	20.5	21.0				---	---	---
3	17.5	16.5	17.5	20.5	18.5	19.5				---	---	---
4	18.0	16.5	17.5	18.5	18.0	18.0				---	---	---
5	18.5	17.5	17.5	18.0	17.5	18.0				---	---	---
6	19.0	17.5	18.0	17.5	16.0	17.0				---	---	---
7	19.0	17.5	18.0	16.0	14.0	15.0				7.0	7.0	7.0
8	19.5	17.5	18.5	14.5	13.0	14.0				7.0	6.5	6.5
9	20.0	18.0	19.0	13.5	12.0	13.0				6.5	5.5	6.0
10	20.5	18.5	19.5	13.5	12.0	13.0				5.5	4.5	5.0
11	21.0	19.0	20.0	---	---	---				5.0	4.5	4.5
12	20.5	19.0	20.0	---	---	---				5.0	4.5	4.5
13	20.0	18.5	19.5	---	---	---				5.0	4.5	5.0
14	19.5	18.0	18.5	---	---	---				5.0	4.5	4.5
15	20.0	18.0	18.5	---	---	---				4.5	4.0	4.5
16	20.0	18.5	19.5	---	---	---				4.5	4.0	4.0
17	21.0	19.0	20.0	---	---	---				4.0	4.0	4.0
18	21.5	20.0	20.5	---	---	---				4.5	4.0	4.5
19	22.0	20.5	21.0	---	---	---				5.0	4.5	4.5
20	22.5	21.0	22.0	---	---	---				5.0	3.5	4.5
21	23.0	21.5	22.5	---	---	---				3.5	2.0	2.5
22	23.5	22.0	22.5	---	---	---				2.0	1.0	1.5
23	23.0	22.0	22.5	---	---	---				2.0	1.0	1.5
24	23.5	22.0	22.5	---	---	---				2.5	1.5	2.0
25	23.0	21.5	22.0	---	---	---				3.0	2.0	2.5
26	22.5	21.0	22.0	---	---	---				3.0	2.0	2.5
27	22.0	21.0	21.5	---	---	---				3.0	2.0	2.5
28	22.5	21.0	21.5	---	---	---				3.5	2.5	3.0
29	23.0	22.0	22.5	---	---	---				4.0	3.0	3.5
30	22.5	21.5	22.0	---	---	---				4.0	3.5	4.0
31	21.5	21.0	21.5	---	---	---				5.0	4.0	4.5
MONTH	23.5	16.5	20.0	21.5	12.0	17.0				7.0	1.0	4.0

02089500 NEUSE RIVER AT KINSTON, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.0	5.0	6.0	12.5	12.0	12.0	21.5	20.0	20.5	26.5	22.5	24.5
2	7.5	7.0	7.0	12.0	11.5	11.5	21.5	18.5	20.0	25.5	23.0	24.5
3	7.0	7.0	7.0	11.5	10.5	11.0	20.0	18.5	19.0	24.0	20.0	22.0
4	7.0	6.5	6.5	12.0	10.5	11.0	20.0	18.5	19.0	22.5	18.0	20.0
5	6.5	6.0	6.0	13.5	12.0	12.5	21.0	18.5	20.0	23.0	18.0	20.5
6	6.0	5.5	5.5	13.5	12.0	13.0	21.5	19.5	20.5	24.5	19.5	22.0
7	6.0	5.0	5.5	13.0	12.0	12.5	21.5	19.0	20.0	25.5	22.0	23.5
8	5.5	4.5	5.0	13.5	12.0	13.0	---	---	---	24.0	21.5	23.0
9	4.5	4.0	4.5	14.0	13.5	13.5	---	---	---	21.0	20.0	20.0
10	4.5	4.0	4.5	14.5	13.0	13.5	17.5	15.5	16.5	23.0	19.0	21.0
11	5.0	4.0	4.5	13.5	13.0	13.5	18.0	8.0	15.5	23.5	21.0	22.0
12	5.5	5.0	5.5	15.0	13.0	14.0	19.5	16.0	17.5	24.5	21.5	23.0
13	5.5	5.0	5.0	15.0	13.5	14.0	19.5	18.0	18.5	26.5	23.5	24.5
14	6.0	5.0	5.5	16.0	13.5	14.5	19.0	18.0	18.5	27.5	23.5	25.5
15	6.5	5.5	6.0	16.5	14.5	15.5	18.5	18.0	18.0	27.5	24.5	26.0
16	6.0	5.5	6.0	15.0	14.0	14.5	20.0	18.0	18.5	27.5	25.0	26.0
17	6.0	5.5	5.5	14.5	13.5	14.0	20.5	18.0	19.0	27.0	24.5	26.0
18	6.5	5.5	6.0	13.5	12.5	13.0	21.0	18.0	19.5	26.5	23.0	24.5
19	6.5	5.5	6.0	12.5	11.5	12.0	22.5	19.0	20.5	26.5	21.5	24.0
20	6.5	6.5	6.5	13.0	11.0	12.0	24.5	21.0	22.5	26.0	22.5	24.5
21	7.0	6.0	6.5	12.5	11.5	12.0	25.0	22.0	23.5	27.5	23.0	25.5
22	8.0	7.0	7.5	11.5	11.0	11.5	25.5	22.5	24.0	27.5	24.5	26.5
23	8.5	7.5	8.0	12.0	11.0	11.5	26.0	23.0	25.0	29.0	25.5	27.0
24	10.5	8.5	9.5	12.0	11.0	11.5	26.0	23.5	25.0	27.0	25.5	26.5
25	11.0	10.5	10.5	12.5	11.5	12.0	26.5	24.0	25.0	26.0	22.5	24.5
26	12.0	10.5	11.0	12.5	11.0	11.5	27.0	24.0	25.0	26.5	22.0	24.0
27	13.0	11.5	12.0	13.5	12.0	12.5	26.5	24.0	25.5	26.5	22.5	24.5
28	13.0	12.0	12.5	15.5	13.0	14.0	27.5	24.5	26.0	27.0	23.5	25.5
29	---	---	---	18.0	15.5	16.0	27.5	25.0	26.0	27.5	24.5	26.5
30	---	---	---	20.0	17.5	18.5	26.0	23.0	24.5	26.5	24.0	25.0
31	---	---	---	21.0	19.5	20.0	---	---	---	27.0	23.0	25.0
MONTH	13.0	4.0	7.0	21.0	10.5	13.5	27.5	8.0	21.0	29.0	18.0	24.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	29.0	25.0	27.0	25.5	23.5	24.5	---	---	---	---	---	---
2	30.5	26.5	28.0	26.5	23.0	25.0	---	---	---	---	---	---
3	31.0	27.0	29.0	28.0	24.5	26.5	---	---	---	---	---	---
4	31.5	27.5	29.5	29.0	26.0	27.0	---	---	---	---	---	---
5	31.0	27.5	29.5	28.5	26.0	27.0	---	---	---	33.0	28.5	31.0
6	31.0	27.5	29.0	29.0	26.0	27.5	---	---	---	33.0	27.5	29.5
7	28.5	27.0	27.5	29.5	27.0	28.0	---	---	---	33.0	28.0	30.5
8	30.0	26.5	28.0	30.5	26.5	28.5	28.5	26.0	27.5	34.0	28.5	31.0
9	31.5	27.0	29.0	31.0	27.5	29.5	29.0	25.0	27.0	33.5	29.0	30.5
10	32.5	28.0	30.0	30.5	28.5	29.5	29.0	26.0	27.5	33.0	28.0	31.0
11	32.0	29.5	31.0	30.5	27.5	29.5	30.0	27.0	28.5	33.0	28.0	30.0
12	31.5	28.5	30.0	29.5	28.0	28.5	30.5	27.0	29.0	28.5	24.5	26.5
13	29.0	26.5	27.5	29.5	26.5	28.0	31.0	27.5	29.5	25.5	22.0	23.5
14	27.5	24.5	26.0	30.0	25.5	27.5	32.0	28.5	30.0	23.0	19.0	21.0
15	26.5	24.0	25.5	30.0	27.0	28.5	32.0	28.5	30.0	23.0	19.0	21.0
16	26.0	24.5	25.0	29.5	28.5	29.0	33.0	29.0	30.0	23.5	18.5	21.0
17	28.5	24.0	26.0	29.0	27.0	28.0	30.5	28.5	29.5	23.5	19.0	21.5
18	30.0	26.5	28.0	29.5	26.5	28.0	29.5	25.5	28.0	24.5	19.5	22.0
19	29.5	27.0	28.0	30.0	26.5	28.0	---	---	---	25.0	20.5	22.5
20	30.0	26.5	28.0	30.0	27.0	28.5	---	---	---	25.5	21.5	23.0
21	28.5	26.0	27.0	31.0	28.0	29.5	---	---	---	24.5	21.0	23.0
22	28.5	25.5	26.5	30.5	28.5	29.5	---	---	---	24.5	21.5	23.0
23	28.0	26.0	27.0	28.5	27.0	27.5	---	---	---	23.5	21.0	22.5
24	29.5	26.0	27.5	27.5	26.0	26.5	---	---	---	23.5	21.0	22.0
25	30.0	26.5	28.5	27.0	24.5	25.5	---	---	---	24.0	22.0	23.0
26	30.5	27.5	29.0	---	---	---	---	---	---	23.0	21.0	22.0
27	29.0	26.0	27.5	---	---	---	---	---	---	23.5	20.0	21.5
28	28.0	25.0	26.5	---	---	---	---	---	---	23.0	20.0	21.5
29	28.0	24.5	26.5	---	---	---	---	---	---	22.0	19.0	20.5
30	27.0	24.5	25.5	---	---	---	---	---	---	23.0	19.0	21.0
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	32.5	24.0	28.0	31.0	23.0	28.0	33.0	25.0	29.0	34.0	18.5	24.5
YEAR	34.0	1.0	19.5									

02089500 NEUSE RIVER AT KINSTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/08	1420	WATER	0	5.29	1530	90	7.00	19.0	19.0	7.6	250
84/11/07	1330	WATER	0	4.29	1040	96	7.00	15.0	14.0	9.2	250
84/12/11	1230	WATER	0	6.14	1930	83	7.30	6.0	32.0	11.0	110
85/01/15	1420	WATER	0	9.47	3800	71	7.00	4.0	20.0	10.7	190
85/02/08	1300	WATER	0	14.06	7270	71	6.70	4.0		10.4	300
85/03/14	1430	WATER	0	6.23	1970	98	7.20	14.0		9.1	820
85/04/02	1320	WATER	0	6.28	2000	101	7.10	19.0	4.6	7.8	650
85/05/14	1100	WATER	0	3.53	763	130	6.80	25.0		6.8	50
85/06/13	1040	WATER	0	3.31	657	134	7.40	27.0		6.9	440
85/07/29	1500	WATER	0	6.40	2050	132	6.80	22.0	38.0	6.2	760
85/08/07	1140	WATER	0.1	4.70	1200	127	6.90	26.0		6.4	340

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/08	1420	WATER	0	19	18	110	.89	.070	.400	.200	.060
84/11/07	1330	WATER	0	25	11	120	.81	.060	.300	.260	.120
84/12/11	1230	WATER	0	20	19	120	.61	.130	.500	.230	.130
85/01/15	1420	WATER	0	19	18	110	.69	.080	.400	.140	.050
85/02/08	1300	WATER	0	10	14	91	.82	.120	.500	.140	.040
85/03/14	1430	WATER	0	20	33	120	.84	.010	.300	.240	.050
85/04/02	1320	WATER	0	19	19	110	.68	.040	.400	.190	.080
85/05/14	1100	WATER	0	12	16	140	1.20	.080	.300	.300	.140
85/06/13	1040	WATER	0		17	130	.75	.060	.300	.380	.270
85/07/29	1500	WATER	0	19	52	160	.70	.110	.500	.390	.210
85/08/07	1140	WATER	0.1	22	24	160	.59	.050	.700	.300	.140

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/08	1420	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/15	1420	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/02	1320	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/29	1500	WATER	0	10K	20K	50	20K	300	.2K	100K	40

K Less than noted value.

02090380 CONTENTNEA CREEK NEAR LUCAMA, NC

LOCATION.--Lat 35°41'29", long 78°06'38", Wilson County, Hydrologic Unit 03020203, on right bank 250 ft upstream from bridge on State Highway 581, 1.0 mi downstream from Buckhorn Reservoir, 1.0 mi upstream from Buckhorn Branch, and 6.5 mi northwest of Lucama.

DRAINAGE AREA.--161 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1964 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 117.43 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Since September 1976, some regulation at low flow by Buckhorn Reservoir 1 mile upstream (station 02102178).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--21 years, 155 ft³/s, 13.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,860 ft³/s Oct. 6, 1964, gage height, 16.28 ft; minimum, 0.04 ft³/s Sept. 9-14, 1976, due to regulation; minimum gage height, 1.07 ft July 14, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,260 ft³/s Feb. 13, gage height, 9.53 ft; minimum, 2.3 ft³/s June 28, gage height, 1.57 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	28	65	45	468	259	95	23	8.4	19	445	22
2	73	29	49	52	846	182	77	20	8.1	41	591	19
3	65	23	122	123	1090	145	64	34	4.2	72	630	17
4	52	27	230	400	1030	129	62	44	4.1	57	493	15
5	43	53	197	627	769	133	62	40	5.6	36	230	13
6	38	61	204	580	588	115	70	33	5.6	25	101	11
7	33	45	219	388	600	102	57	28	3.2	21	65	9.3
8	31	35	146	234	504	95	56	20	5.0	16	52	9.4
9	29	30	112	167	347	88	57	18	5.0	12	46	11
10	28	28	88	136	241	80	34	20	3.3	10	37	18
11	27	32	74	136	195	69	41	20	4.8	19	30	16
12	25	34	66	127	583	82	44	24	6.1	14	25	14
13	25	30	63	116	1140	58	49	29	5.9	12	22	11
14	22	20	65	108	1120	62	57	30	3.6	11	20	11
15	19	21	59	104	795	62	60	25	6.4	8.7	17	11
16	18	23	54	76	455	51	63	24	9.9	7.4	17	11
17	20	22	53	100	279	61	156	25	23	8.8	17	11
18	22	21	55	137	208	63	390	24	60	8.0	52	11
19	23	23	55	148	194	49	406	18	111	7.6	196	11
20	26	24	54	133	188	50	186	14	69	8.0	152	11
21	26	21	55	99	179	48	102	16	41	6.9	84	11
22	24	21	59	77	163	88	74	18	26	4.6	61	11
23	28	21	53	69	151	215	56	19	19	3.9	51	11
24	25	24	49	68	137	263	46	23	13	3.5	36	11
25	25	25	54	79	122	242	42	19	8.6	21	33	11
26	26	25	49	86	210	258	33	17	6.7	159	38	11
27	27	24	45	67	369	260	32	15	3.7	442	58	13
28	30	40	45	66	333	191	31	14	2.8	488	66	11
29	32	76	48	73	---	136	26	9.4	3.7	435	52	11
30	30	82	45	86	---	115	24	7.1	8.3	530	42	11
31	29	---	44	163	---	101	---	7.6	---	576	29	---
TOTAL	982	968	2576	4870	13304	3852	2552	678.1	485.0	3083.4	3788	374.7
MEAN	31.7	32.3	83.1	157	475	124	85.1	21.9	16.2	99.5	122	12.5
MAX	73	82	230	627	1140	263	406	44	111	576	630	22
MIN	18	20	44	45	122	48	24	7.1	2.8	3.5	17	9.3
CFSM	.20	.20	.52	.98	2.95	.77	.53	.14	.10	.62	.76	.08
IN.	.23	.22	.60	1.13	3.07	.89	.59	.16	.11	.71	.88	.09

CAL YR 1984 TOTAL 98884.8 MEAN 270 MAX 2420 MIN 9.8 CFSM 1.68 IN. 22.85
WTR YR 1985 TOTAL 37513.2 MEAN 103 MAX 1140 MIN 2.8 CFSM .64 IN. 8.67

NEUSE RIVER BASIN

02090380 CONTENTNEA CREEK NEAR LUCAMA, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/12	0915	WATER	0	2.09	27	38	7.40	18.0		8.5	20
84/11/05	0930	WATER	0	2.36	51	40	7.60	16.0	12.0	8.4	100
84/12/03	0930	WATER	0	2.78	101	40	7.40	9.0		10.5	210
85/01/10	1030	WATER	0	2.95	136	35		4.0		10.4	240
85/02/14	0945	WATER	0	9.20	1170	30	7.00	5.0	130.0	12.0	320
85/03/21	1040	WATER	0	2.37	47	40	7.00	10.0		11.0	20
85/04/22	1040	WATER	0	2.57	861	61	7.40	22.0		8.6	10K
85/05/23	1130	WATER	0	2.00	21	60	7.10	22.0	10.0	7.0	10
85/06/24	1130	WATER	0	1.91	15	61	7.00	23.0		6.4	10
85/07/22	1155	WATER	0	1.70	5	65	6.80	28.0		3.5	10K
85/08/27	1220	WATER	0.1	2.40	60	51	7.00	23.0	8.4	7.4	40
85/09/11	1215	WATER	0.1	1.94	16	61	7.10	25.0		6.4	10

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/12	0915	WATER	0	22	8	110					
84/11/05	0930	WATER	0	26	9	63	.10	.060	.300	.070	.010
84/12/03	0930	WATER	0	25	6	65					
85/01/10	1030	WATER	0		13	93					
85/02/14	0945	WATER	0	45	25	130	.32	.060	.400	.130	.010
85/03/21	1040	WATER	0	18	6	79					
85/04/22	1040	WATER	0	66	16	93					
85/05/23	1130	WATER	0	21	9	78	.04	.060	.500	.060	.010K
85/06/24	1130	WATER	0	20	8	90					
85/07/22	1155	WATER	0	20	1K	140					
85/08/27	1220	WATER	0.1	15	9	100	.04	.050	.600	.550	.010K
85/09/11	1215	WATER	0.1	21	10	74					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/05	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/14	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/23	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	1220	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02090512 HOMINY SWAMP AT PHILLIPS STREET AT WILSON, NC

LOCATION.--Lat 35°42'39", long 77°55'00", Wilson County, Hydrologic Unit 03020203, on left bank 17 ft upstream from culvert on Phillips Street, at Wilson, and 0.2 mi upstream from Seaboard Coastline Railroad.

DRAINAGE AREA.--7.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1978 to September 1985 (discontinued).

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good above 1 ft^3/s and fair below. Recording rain gage at station.

COOPERATION.--Chemical and biological data shown in last table were provided the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--7 years, 8.25 ft^3/s, 14.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 943 ft^3/s Sept. 5, 1979, gage height, 11.90 ft; no flow July 13-15, Oct. 18-23, 1981, Aug. 14-16, 1983, Sept. 14-21, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 16	1530	*405	*7.67	No other peak greater than base discharge.			

No flow Sept. 14-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	1.2	.70	.51	38	9.0	2.4	.01	.02	9.9	44	.02
2	4.4	.97	.57	1.4	71	8.1	2.2	.02	.02	3.4	111	.02
3	.65	.82	43	37	23	5.9	2.1	18	.03	5.7	15	.02
4	.41	10	3.3	42	14	4.6	2.1	1.8	.02	1.7	9.8	.02
5	.23	9.5	13	19	23	4.4	1.2	.27	1.4	.13	8.0	.02
6	.17	2.7	8.3	9.7	32	3.4	3.2	.13	5.1	.19	6.6	.02
7	.16	.93	3.5	7.7	18	3.0	.97	.09	.34	3.1	5.6	.02
8	.20	.63	2.4	6.4	12	3.2	.70	.24	.82	1.0	24	.02
9	.17	.62	2.2	4.7	10	3.0	.90	.10	.73	.76	5.2	.01
10	.20	.62	2.8	5.1	9.4	2.8	.81	.12	.66	.12	4.0	.01
11	.06	1.0	2.3	4.3	8.8	2.8	.87	.16	1.6	28	4.3	.01
12	.15	.90	1.7	3.4	94	3.1	.77	.09	6.5	2.2	2.4	.01
13	.22	1.1	1.5	2.5	22	2.6	2.8	4.4	8.4	.70	1.7	.01
14	.10	1.3	1.4	2.0	15	2.4	3.4	3.3	.58	3.4	1.5	.00
15	.15	1.3	1.3	2.0	12	2.1	1.3	.53	.06	1.1	1.4	.00
16	.23	1.0	1.8	1.6	10	2.1	5.2	.66	23	83	1.2	.00
17	10	.84	1.8	13	9.2	3.0	3.0	1.3	8.8	22	4.3	.00
18	11	.66	1.8	7.4	8.0	2.1	.65	.20	8.1	7.6	14	.00
19	.37	.77	1.7	5.4	7.1	1.8	.32	.05	6.8	4.2	19	.00
20	.35	.96	1.7	5.2	8.5	1.9	.24	.14	1.1	2.6	7.9	.00
21	.22	.90	1.7	3.7	7.9	1.7	.16	.10	.14	1.5	9.6	.00
22	1.4	.78	2.0	3.1	6.7	23	.13	.35	.05	1.1	7.7	4.5
23	1.1	.79	1.2	2.8	5.9	7.5	.09	7.5	.05	1.4	2.6	.71
24	.45	.94	1.0	2.9	5.3	5.4	.03	9.1	.05	4.7	1.0	.01
25	.44	1.0	.96	3.0	4.6	11	.05	.71	.05	56	9.8	.01
26	.54	1.1	.84	2.2	23	5.2	.04	.14	.04	22	5.8	9.6
27	2.4	1.1	1.7	1.8	10	4.2	.06	.02	.05	24	1.9	14
28	3.8	26	1.0	5.1	7.1	3.5	.11	.02	.05	22	.66	.58
29	3.9	6.1	1.2	5.6	---	3.4	.24	.14	1.8	15	.07	.01
30	.97	1.9	.82	3.4	---	3.0	.02	.04	11	10	.04	.01
31	.99	---	.43	48	---	2.5	---	.02	---	27	.03	---
TOTAL	67.43	78.43	109.62	261.91	515.5	141.7	36.06	49.75	87.36	365.50	330.10	29.64
MEAN	2.18	2.61	3.54	8.45	18.4	4.57	1.20	1.60	2.91	11.8	10.6	.99
MAX	22	26	43	48	94	23	5.2	18	23	83	111	14
MIN	.06	.62	.43	.51	4.6	1.7	.02	.01	.02	.12	.03	.00
CFSM	.28	.33	.45	1.07	2.33	.58	.15	.20	.37	1.49	1.34	.13
IN.	.32	.37	.52	1.23	2.43	.67	.17	.23	.41	1.72	1.55	.14

CAL YR 1984	TOTAL	4291.63	MEAN	11.7	MAX	354	MIN	.02	CFSM	1.48	IN. 20.21
WTR YR 1985	TOTAL	2073.00	MEAN	5.68	MAX	111	MIN	.00	CFSM	.72	IN. 9.76

02090512 HOMINY SWAMP AT PHILLIPS STREET AT WILSON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/12	1000	WATER	0	.99	.3	228	7.40	18.0		8.8	200
84/11/05	1030	WATER	0	1.41	9	75	7.40	16.0	22.0	4.0	5500
84/12/03	1000	WATER	0	1.92	10	61	7.10	10.0		9.0	4500
85/01/10	1110	WATER	0	1.40	4	105		4.0		10.5	330
85/02/14	1025	WATER	0	1.82	10	82	7.00	5.0	30.0	11.7	1200
85/03/21	1120	WATER	0	1.28	.5	180	7.10	10.0		10.3	90
85/04/22	1130	WATER	0	1.05	.1	292	7.30	23.0		4.8	370
85/05/23	1208	WATER	0	1.04	.3	250	7.40	27.0	17.0	10.0	1100
85/06/24	1045	WATER	0	.92	.05	185	8.20	25.0		17.2	10
85/07/22	1120	WATER	0	1.07	1	245	7.30	27.0		13.8	580
85/08/27	1144	WATER	0.1	1.17	.06	205	7.00	25.0	40.0	4.2	520
85/09/11	1145	WATER	0.1	.90	.05	348	7.50	26.0		9.4	260

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/12	1000	WATER	0	92	16	220	.80	.490	.900	.160	.020
84/11/05	1030	WATER	0	36	20	110	.21	.020	.500	.290	.100
84/12/03	1000	WATER	0	23	130	250	.77	.180	.700	.470	.180
85/01/10	1110	WATER	0		9	160	1.50	.510	.800	.110	.020
85/02/14	1025	WATER	0	104	11	140	1.50	.500	.700	.100	.030
85/03/21	1120	WATER	0	82	4	170	1.60	.270	.600	.070	.010
85/04/22	1130	WATER	0	390	17	220	.39	.730	1.400	.230	.020
85/05/23	1208	WATER	0	76	20	190	.26	.390	1.200	.260	.030
85/06/24	1045	WATER	0	60	36	170	.25	.800	1.800	.380	.010K
85/07/22	1120	WATER	0	63	30	300	.72	3.600	3.600	.490	.080
85/08/27	1144	WATER	0.1	66	26	190	.88	1.300	1.900	.070	.050
85/09/11	1145	WATER	0.1	101	33	250	.28	.260	1.200	.240	.030

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/05	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/02/14	1025	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/05/23	1208	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/08/27	1144	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02090625 TURNER SWAMP NEAR EUREKA, NC

LOCATION.--Lat 35°34'14", long 77°52'47", Wayne County, Hydrologic Unit 03020203, on right bank at downstream side of bridge on Secondary Road 1505, 2.0 mi north of Eureka, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--2.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1968 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Elevation of gage is 90 ft, by barometer.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--17 years, 2.33 ft^3/s, 15.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 652 ft^3/s Aug. 5, 1974, gage height, 5.78 ft; minimum, 0.05 ft^3/s May 31, 1985, gage height 0.64 ft, result of unknown regulation; minimum unregulated, 0.14 ft^3/s Oct. 10, 11, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	0900	*51	*2.92	No other peak greater than base discharge.			

Minimum discharge, 0.05 ft^3/s May 31, gage height 0.64, result of unknown regulation; minimum unregulated, 0.19 ft^3/s Sept. 13, gage height 0.77 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.65	1.2	.90	4.3	2.0	1.2	1.2	.55	.59	2.4	.31
2	1.4	.65	1.1	.92	9.4	2.2	1.1	.98	.48	.52	7.5	.30
3	1.1	.56	2.2	3.0	5.4	1.9	1.1	1.4	.45	.53	1.1	.32
4	.99	.92	1.6	7.4	3.6	1.8	1.1	1.2	.40	.45	.62	.28
5	.94	1.1	2.0	4.1	5.1	2.0	1.1	.97	.47	.44	.54	.29
6	.94	.78	2.4	2.3	15	1.8	1.2	.88	.39	.49	.52	.30
7	.95	.69	1.6	1.9	6.3	1.7	1.1	.81	.38	.53	.49	.27
8	.93	.65	1.3	1.6	4.2	1.9	1.1	.72	.39	.53	.54	.28
9	.91	.63	1.2	1.4	3.4	1.8	1.0	.81	.38	.49	.60	.30
10	.89	.61	1.2	1.4	2.9	1.6	1.1	.89	.33	.45	.69	.27
11	.87	.60	1.2	1.6	2.7	1.6	1.2	1.1	.33	1.2	.55	.27
12	.85	.55	1.1	1.4	23	1.6	1.2	1.2	.33	.47	.49	.36
13	.86	.53	1.1	1.3	7.1	1.5	1.3	.97	.38	.45	.49	.23
14	.83	.49	1.1	1.3	4.8	1.5	1.5	.88	.36	.39	.45	.26
15	.79	.48	1.0	1.2	3.9	1.4	1.4	.79	.42	.43	.31	.21
16	.82	.48	1.1	1.1	3.3	1.4	1.7	.74	.80	.61	.32	.32
17	.82	.45	1.1	2.2	3.0	1.9	1.8	.73	.60	.63	.49	.24
18	.97	.45	1.1	2.1	2.6	1.5	1.2	.69	.58	.59	.58	.25
19	.93	.91	1.1	1.6	2.6	1.4	1.1	.64	.77	.53	.59	.26
20	.87	.73	1.1	1.5	3.1	1.4	1.0	.63	.72	.52	.46	.31
21	.83	.47	1.1	1.1	2.6	1.4	.95	.73	.47	.52	.43	.32
22	.81	.58	1.0	1.1	2.4	3.0	.91	.66	.45	.49	.43	.39
23	.85	.58	1.0	1.2	2.3	2.3	.84	.48	.45	.54	.40	.53
24	.78	.58	1.1	1.3	2.3	1.8	.79	.50	.45	.66	.34	.48
25	.78	.56	1.1	1.3	2.2	1.7	.80	.53	.43	3.0	.54	.45
26	.79	.57	1.0	1.2	2.1	1.5	.75	.45	.39	1.1	.53	1.3
27	.77	.58	.94	1.1	2.2	1.5	.74	.41	.35	.72	.36	1.9
28	.75	1.3	.94	1.3	2.0	1.4	.76	.37	.35	.83	.37	.39
29	.71	1.9	.93	1.5	---	1.4	1.4	.42	.38	2.1	.35	.32
30	.69	1.4	.93	1.4	---	1.3	1.6	.54	.47	.71	.33	.28
31	.69	---	.90	6.4	---	1.2	---	.46	---	.60	.34	---
TOTAL	28.31	21.43	37.74	59.12	133.8	52.4	34.04	23.78	13.70	22.11	24.15	11.99
MEAN	.91	.71	1.22	1.91	4.78	1.69	1.13	.77	.46	.71	.78	.40
MAX	2.2	1.9	2.4	7.4	23	3.0	1.8	1.4	.80	3.0	7.5	1.9
MIN	.69	.45	.90	.90	2.0	1.2	.74	.37	.33	.39	.31	.21
CFSM	.43	.34	.58	.91	2.28	.80	.54	.37	.22	.34	.37	.19
IN.	.50	.38	.67	1.05	2.37	.93	.60	.42	.24	.39	.43	.21

CAL YR 1984 TOTAL 954.94 MEAN 2.61 MAX 67 MIN .45 CFSM 1.24 IN. 16.92
WTR YR 1985 TOTAL 462.57 MEAN 1.27 MAX 23 MIN .21 CFSM .60 IN. 8.19

02090625 TURNER SWAMP NEAR EUREKA, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	1035	WATER	0			81	6.90	17.0	5.6	7.5	130
84/11/28	1030	WATER	0	1.21	.6	50	6.60	13.0		8.2	290
84/12/12	1045	WATER	0	1.11	1	54	6.80	7.0		9.8	90
84/12/25	1035	WATER	0	1.11	1						
85/01/16	1305	WATER	0	1.11	1		6.50	5.0	6.5	11.3	70
85/02/11	1230	WATER	0	1.37	3	56	6.50	5.0		10.9	50
85/03/26	1130	WATER	0	1.17	1	65	7.30	10.0		10.8	30
85/04/15	1215	WATER	0	1.14	1	60	7.10	15.0	7.5	7.2	80
85/05/23	1240	WATER	0	.95	.4			21.0		2.6	190
85/06/27	1200	WATER	0	.96	.4	56	6.30	19.0		2.0	380
85/07/18	1250	WATER	0	1.02	6	64	6.10	22.0	12.0	2.0	40
85/08/20	1210	WATER	0.1	.95	.5	59		23.0		2.3	20
85/09/23	1200	WATER	0.1	.99	.6	50	6.50	19.0		2.3	40

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	1035	WATER	0	13	3	74	1.10	.020	.300	.050	.020
84/11/28	1030	WATER	0	15	3	81					
84/12/12	1045	WATER	0	13	2	88					
85/01/16	1305	WATER	0	6	3	79	1.40	.040	.200	.030	.010
85/02/11	1230	WATER	0	8	4	81	1.40	.040	.200	.030	.010K
85/03/26	1130	WATER	0	12	8	67	.91	.010	.200	.040	.010
85/04/15	1215	WATER	0	16	6	79	.71	.030	.300	.050	.010
85/05/23	1240	WATER	0		7	77	.29	.120	.400	.100	.010
85/06/27	1200	WATER	0	13	18	100	.03	.130	.500	.150	.010
85/07/18	1250	WATER	0		7	81	.03	.120	.600	.120	.010
85/08/20	1210	WATER	0.1		9	100					
85/09/23	1200	WATER	0.1	16	6	82	.16	.110	.400	.090	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/25	1035	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/16	1305	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/04/15	1215	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/18	1250	WATER	0		20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02091000 NAHUNTA SWAMP NEAR SHINE, NC

LOCATION.--Lat 35°29'20", long 77°48'22", Greene County, Hydrologic Unit 03020203, on right bank 10 ft downstream from bridge on Secondary Road 1058, 2 mi upstream from Appletree Swamp, 3.5 mi north of Shine, and 8 mi northwest of Snow Hill.

DRAINAGE AREA.--80.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1954 to current year. Monthly discharges only for some periods, published in WSP 1723.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 50.74 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1955, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--31 years, 86.1 ft^3/s, 14.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,470 ft^3/s Oct. 6, 1964, gage height, 14.14 ft; minimum, 1.0 ft^3/s Oct. 7, 8, 1954, gage height, 0.80 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 580 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 6	1230	590	6.58	Feb. 12	1530	*705	*7.13

Minimum discharge, 2.8 ft^3/s July 10, gage height, 0.94 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	24	32	24	148	81	37	14	6.7	5.9	22	8.5
2	66	23	29	24	253	90	34	13	6.7	8.6	91	7.8
3	50	22	45	49	256	80	33	18	6.4	6.3	45	7.8
4	44	24	41	282	154	74	31	21	6.2	4.7	24	7.0
5	39	43	39	236	144	73	30	18	5.5	4.0	18	6.5
6	36	31	59	111	470	68	31	14	6.3	3.8	15	6.4
7	35	26	47	79	338	63	30	13	5.5	4.0	13	6.6
8	34	23	39	65	209	63	27	12	6.2	3.7	17	5.8
9	32	23	36	55	153	62	26	12	6.2	3.2	26	5.6
10	31	23	34	52	129	59	26	13	5.0	3.0	79	5.4
11	30	23	35	57	118	56	27	15	4.8	9.3	34	4.7
12	28	23	33	52	513	57	27	17	4.8	12	21	4.5
13	28	21	31	48	505	54	25	18	4.6	6.1	16	4.3
14	27	20	31	45	280	52	35	14	4.3	4.8	13	4.1
15	25	20	30	43	206	50	37	13	4.2	8.5	11	4.2
16	25	20	30	40	164	48	50	11	6.0	7.7	9.9	3.8
17	25	20	30	51	140	54	68	16	9.4	165	11	4.1
18	26	20	29	69	124	53	41	13	7.7	42	23	3.9
19	27	22	29	56	115	47	34	12	9.4	18	47	3.8
20	27	29	28	50	127	45	29	10	12	10	31	3.7
21	25	26	29	42	124	44	25	9.2	8.6	7.7	21	3.6
22	23	24	29	39	110	71	23	11	6.5	6.6	21	4.0
23	24	23	28	40	104	89	20	11	6.1	8.5	18	6.8
24	24	23	27	41	100	66	18	9.2	5.7	8.5	14	7.1
25	23	23	27	43	95	60	18	11	4.7	30	12	5.8
26	24	22	25	42	91	53	17	9.7	4.0	61	29	7.0
27	25	23	25	39	89	49	16	9.4	3.9	36	17	41
28	25	30	25	42	84	47	15	7.8	3.8	37	13	19
29	26	62	25	48	---	44	15	7.9	3.7	81	11	10
30	25	43	25	48	---	42	15	6.9	3.9	35	9.4	8.2
31	26	---	24	123	---	39	---	6.7	---	21	9.6	---
TOTAL	977	779	996	2035	5343	1833	860	386.8	178.8	662.9	741.9	221.0
MEAN	31.5	26.0	32.1	65.6	191	59.1	28.7	12.5	5.96	21.4	23.9	7.37
MAX	72	62	59	282	513	90	68	21	12	165	91	41
MIN	23	20	24	24	84	39	15	6.7	3.7	3.0	9.4	3.6
CFSM	.39	.32	.40	.82	2.38	.74	.36	.16	.07	.27	.30	.09
IN.	.45	.36	.46	.94	2.47	.85	.40	.18	.08	.31	.34	.10

CAL YR 1984 TOTAL 39465.9 MEAN 108 MAX 1720 MIN 9.2 CFSM 1.34 IN. 18.26
WTR YR 1985 TOTAL 15014.4 MEAN 41.1 MAX 513 MIN 3.0 CFSM .51 IN. 6.95

02091000 NAHUNTA SWAMP NEAR SHINE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	0950	WATER	0	1.84	23	80	6.70	18.0	5.5	6.3	50
84/11/28	0950	WATER	0	1.92	23	77	6.70	11.0		8.2	20
84/12/12	1010	WATER	0	2.18	33	80	6.60	8.0		9.4	60
85/01/16	1200	WATER	0	2.23	40		6.70	3.0	7.9	11.7	60
85/02/11	1200	WATER	0	3.05	117	85	6.60	4.0		11.6	30
85/03/26	1100	WATER	0	2.33	53	78	7.20	9.0		10.0	70
85/04/15	1145	WATER	0	2.12	38	84	7.30	15.0	12.0	8.4	90
85/05/23	1200	WATER	0	1.39	11			21.0		6.7	250
85/06/27	1130	WATER	0	.99	4	77	6.50	20.0		6.4	180
85/07/18	1205	WATER	0	2.14	37	94	5.60	23.0	40.0	7.5	500
85/08/20	1135	WATER	0.1	1.95	30	83					430
85/09/23	1040	WATER	0.1	1.18	6	90	6.80	19.0		7.0	500

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	0950	WATER	0	17	1	110	1.40	.100	.400	.210	.090
84/11/28	0950	WATER	0	17	2	98					
84/12/12	1010	WATER	0	12	3	100					
85/01/16	1200	WATER	0	10	5	110	1.90	.200	.500	.080	.030
85/02/11	1200	WATER	0	8	5	110	2.40	.160	.400	.080	.020
85/03/26	1100	WATER	0	11	6	87	1.40	.060	.300	.100	.030
85/04/15	1145	WATER	0	16	8	100	1.20	.140	.400	.250	.060
85/05/23	1200	WATER	0		9	92	1.30	.090	.300	.260	.100
85/06/27	1130	WATER	0	14	6	96	.65	.060	.400	.220	.070
85/07/18	1205	WATER	0		15	120	1.20	.120	.700	.180	.050
85/08/20	1135	WATER	0.1		11	120	1.20	.050	.800	.160	.090
85/09/23	1040	WATER	0.1	15	4	94	.85	.020	.400	.160	.050

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/25	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/16	1200	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/04/15	1145	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/18	1205	WATER	0		20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02091500 CONTENTNEA CREEK AT HOOKERTON, NC
(National stream-quality accounting network station)

LOCATION.--Lat 35°25'40", long 77°35'10", Greene County, Hydrologic Unit 03020203, on right bank at Hookerton, 0.3 mi upstream from bridge on State Highway 123, and 2.5 mi upstream from Wheat Swamp Creek.

DRAINAGE AREA.--729 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1928 to current year.

REVISED RECORDS.--WSP 1333: 1903-35. WSP 1383: Drainage area. WSP 1503: 1951. WSP 1723: 1932.

GAGE.--Water-stage recorder. Datum of gage is 14.85 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 26, 1934, nonrecording gage at site 200 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--56 years (water years 1930-85), 776 ft^3/s, 14.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft^3/s Oct. 7, 1964; maximum gage height, 22.11 ft Oct. 8, 1964; minimum discharge, 15 ft^3/s Oct. 28, 1933, gage height, 1.22 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1928 reached a stage of 23.3 ft, from floodmark; high water of autumn 1924 was about 0.1 ft lower, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,770 ft^3/s Feb. 9, gage height, 13.23 ft; minimum, 35 ft^3/s June 15, 16; minimum gage height, 3.03 ft June 15, 16, Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	203	355	309	791	959	628	161	64	45	528	172
2	493	204	381	304	986	989	556	152	61	42	623	158
3	506	204	432	323	1150	1020	492	145	58	42	729	141
4	505	202	482	553	1380	1040	438	144	55	45	803	126
5	499	223	527	900	1600	1030	394	148	52	54	867	113
6	468	251	612	1030	1960	983	363	156	50	53	940	102
7	409	256	686	1150	2320	903	338	156	48	53	1020	93
8	361	250	748	1240	2640	819	323	167	47	63	1090	83
9	323	266	787	1350	2760	758	311	145	47	68	1040	77
10	294	282	791	1460	2710	706	298	138	48	64	776	72
11	271	269	765	1500	2580	658	287	130	45	65	600	68
12	251	249	705	1400	2660	623	277	124	41	59	451	63
13	244	227	629	1220	2620	598	267	126	39	60	363	59
14	233	214	564	1030	2460	577	264	131	37	88	284	55
15	217	204	512	876	2310	552	269	121	35	103	221	53
16	206	201	470	757	2220	516	281	110	36	70	176	51
17	200	198	437	688	2250	491	299	108	43	61	149	49
18	96	193	416	680	2330	481	405	110	45	102	140	48
19	194	192	401	696	2340	473	446	114	49	161	165	47
20	200	197	388	712	2270	455	401	106	68	161	185	46
21	214	208	379	720	2090	438	406	98	69	137	303	45
22	209	217	375	716	1830	455	464	96	64	107	519	46
23	197	216	372	684	1550	544	486	93	56	82	591	52
24	191	212	366	634	1330	610	420	91	53	67	571	50
25	188	210	360	584	1190	671	327	88	62	88	420	51
26	188	210	351	555	1090	723	263	86	63	119	303	57
27	189	208	344	537	1020	773	224	90	56	123	258	173
28	195	211	334	532	977	792	201	83	49	224	235	181
29	200	249	327	541	---	776	184	76	44	301	210	151
30	203	309	325	553	---	740	171	71	42	405	197	131
31	203	---	318	596	---	694	---	67	---	481	185	---
TOTAL	8713	6735	14939	24830	53414	21847	10483	3631	1526	3593	14942	2613
MEAN	281	225	482	801	1908	705	349	117	50.9	116	482	87.1
MAX	506	309	791	1500	2760	1040	628	167	69	481	1090	181
MIN	188	192	318	304	791	438	171	67	35	42	140	45
CFSM	.39	.31	.66	1.10	2.62	.97	.48	.16	.07	.16	.66	.12
IN.	.44	.34	.76	1.27	2.73	1.11	.53	.19	.08	.18	.76	.13

CAL YR 1984 TOTAL 438711 MEAN 1199 MAX 5340 MIN 119 CFSM 1.64 IN. 22.39
WTR YR 1985 TOTAL 167266 MEAN 458 MAX 2760 MIN 35 CFSM .63 IN. 8.54

02091500 CONTENTNEA CREEK AT HOOKERTON, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950, 1969-72, 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1979 to September 1984.
WATER TEMPERATURE: October 1949 to September 1950, March 1979 to September 1984.

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1984.

REMARKS.--Station operated as part of NASQAN network from March 1979 to present. Miscellaneous chemical data published for water years 1945, 1947-49, 1955-67.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1979-84): Maximum, 218 microsiemens Nov. 1, 10, 1983; minimum daily, 41 microsiemens June 11, 1979.
WATER TEMPERATURE (water years 1950, 1979-84): Maximum, 29.5°C Aug. 23, 1983; minimum daily, 1.0°C Jan. 13, 14, 1981, Jan. 18, 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV 07...	1200	238	105	6.3	14.5	3.9	770	7.6	74	180	190	22
JAN 07...	1215	1150	98	6.1	7.0	13	755	10.4	86	2100	2800	20
MAR 20...	1300	454	97	6.0	12.0	4.5	766	9.7	90	--	--	21
MAY 13...	1345	126	130	6.2	23.0	5.1	760	5.0	58	140	110	22
JUL 10...	1345	64	130	6.2	29.0	2.5	757	8.5	111	K2000	250	16
SEP 05...	1230	112	101	5.9	26.0	4.5	763	6.0	74	260	2000	20

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV 07...	6	5.0	2.2	9.9	45	1	3.7	9.4	12	.10	8.4	93
JAN 07...	4	4.7	2.0	7.7	40	.8	3.7	7.8	13	.10	7.9	78
MAR 20...	10	5.0	2.1	7.5	40	.7	2.7	8.5	11	.10	6.5	86
MAY 13...	6	4.9	2.3	14	53	1	4.0	11	13	.20	6.6	84
JUL 10...	0	3.1	2.0	16	59	2	6.2	10	17	.20	3.4	82
SEP 05...	3	4.5	2.0	11	50	1	3.4	9.5	11	<.10	8.8	72

K Results based on colony count outside the acceptable range (non-ideal colony count).

02091500 CONTENTNEA CREEK AT HOOKERTON, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
NOV 07...	63	.13	60	1.6	.320	.41	.70	1.60	.390	.370	1.1
JAN 07...	58	.11	242	1.2	.230	.30	1.0	.330	.270	.230	.71
MAR 20...	51	.12	105	.64	.020	.03	.60	.320	.060	.090	.28
MAY 13...	68	.11	29	2.2	.310	.40	.60	.630	.450	.440	1.3
JUL 10...	72	.11	14	1.5	<.010	--	.80	.780	.690	.610	1.9
SEP 05...	63	.10	22	1.4	.180	.23	.80	.480	.410	.380	1.2

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
NOV 07...	150	<1	36	<.5	<1	1	<3	2	870	1	<4
JAN 07...	110	<1	37	<.5	2	<1	<3	5	290	1	<4
MAR 20...	--	--	--	--	--	--	--	--	--	--	--
MAY 13...	110	<1	32	<.5	<1	5	<3	2	810	2	7
JUL 10...	--	--	--	--	--	--	--	--	--	--	--
SEP 05...	70	2	33	.7	<1	<1	<3	2	860	2	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 07...	23	.2	<10	1	<1	1	29	<6	20	7	4.5	69
JAN 07...	32	.6	<10	1	<1	<1	26	<6	15	17	53	85
MAR 20...	--	--	--	--	--	--	--	--	--	9	11	84
MAY 13...	50	.1	<10	8	<1	<1	31	<6	38	7	2.4	94
JUL 10...	--	--	--	--	--	--	--	--	--	7	1.2	90
SEP 05...	66	.1	<10	5	<1	<1	29	<6	9	11	3.3	85

NEUSE RIVER BASIN

02091500 CONTENTNEA CREEK AT HOOKERTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/09	1400	WATER	0	6.34	319	80	6.80	18.0	8.2	7.5	270
84/11/13	1330	WATER	0	5.38	226	78	6.80	10.0		7.8	70
84/12/11	1400	WATER	0	8.97	762	70	7.40	5.0		10.5	160
85/01/16	1625	WATER	0	8.85	740		6.90	3.0	9.0	11.1	350
85/02/08	1130	WATER	0	13.11	2650	57	6.40	4.0		10.8	450
85/03/14	1215	WATER	0	7.82	577	87	7.00	13.0		7.6	150
85/04/02	1510	WATER	0	7.61	545	78	7.20	19.0	3.3	7.1	40
85/05/23	1200	WATER	0	3.86	92			26.0		6.2	60
85/06/27	1530	WATER	0	3.38	54	186	7.00	26.0		7.9	60
85/07/29	1255	WATER	0	6.23	302	105	6.70	25.0	22.0	5.3	830
85/08/20	1400	WATER	0.1	4.85	205	100		25.0		4.8	100
85/09/23	1515	WATER	0.1	3.19	51	106	7.00	22.0		6.8	240

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/09	1400	WATER	0	16	9	99	1.20	.190	.500	.260	.120
84/11/13	1330	WATER	0	20	3	86					
84/12/11	1400	WATER	0	28	4	100					
85/01/16	1625	WATER	0	13	6	110	1.10	.440	.600		.140
85/02/08	1130	WATER	0	6	15	95	.99	.160	.600	.190	.070
85/03/14	1215	WATER	0	16	12	92	1.20	.300	.600	.270	.130
85/04/02	1510	WATER	0	16	8	83	.80	.090	.400	.260	.120
85/05/23	1200	WATER	0		7	110	1.90	.590	.900	.660	.420
85/06/27	1530	WATER	0	24	6	150	2.50	.200	.600	.610	.400
85/07/29	1255	WATER	0	18	11	110	1.50	.660	1.200	.700	.510
85/08/20	1400	WATER	0.1		11	130	1.30	.300	.800	.510	.290
85/09/23	1515	WATER	0.1	24	6	110	1.50	.660	.900	.560	.370

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/09	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/16	1625	WATER	0					100K	.2K	100K	20K
85/04/02	1510	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/29	1255	WATER	0		20K	50K	20K	100K	.2K	100K	20

K Less than noted value.

NEUSE RIVER BASIN

02091700 LITTLE CONTENTNEA CREEK NEAR FARMVILLE, NC

LOCATION.--Lat 35°32'40", long 77°30'41", Pitt County, Hydrologic Unit 03020203, near center of span on downstream side of bridge on U.S. Highway 264, 1.5 mi upstream from Middle Swamp, and 5.5 mi southeast of Farmville.

DRAINAGE AREA.--93.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements water years 1952-54, 1956. October 1956 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1956 to Aug. 19, 1958, and June 23, 1964 to Aug. 24, 1965, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--29 years, 117 ft^3/s, 17.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,170 ft^3/s Oct. 6, 1964, gage height, 19.65 ft from floodmark, from rating curve extended above 3,100 ft^3/s; no flow part of each day July 30, 31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August and September 1955 reached stages of 18.9 ft and 18.5 ft, respectively.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharges of 660 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 13	0530	*837	*13.36	No other peak greater than base discharge.			

Minimum discharge, 0.01 ft^3/s June 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	11	15	21	222	66	21	3.1	.71	.79	12	7.3
2	41	11	16	22	323	82	19	3.1	.63	1.8	66	7.3
3	38	12	18	28	474	83	18	3.6	.50	2.4	102	7.1
4	32	11	20	89	437	73	17	4.1	.35	3.1	75	7.0
5	28	11	22	217	379	66	16	4.2	.25	4.4	29	6.9
6	24	10	30	205	504	60	15	3.8	.19	4.1	13	6.9
7	21	9.8	29	136	608	54	15	3.6	.18	3.9	8.5	6.7
8	19	9.2	26	83	526	50	14	3.7	.17	3.5	8.8	6.5
9	18	8.7	24	61	419	48	14	3.4	.13	3.1	65	6.2
10	18	8.1	22	53	272	46	14	3.3	.10	2.6	40	6.0
11	17	7.5	21	55	185	43	13	3.3	.07	4.0	15	5.9
12	17	7.0	20	55	528	42	13	3.2	.06	4.8	8.8	5.8
13	17	6.6	20	52	790	39	13	2.5	.04	5.1	7.9	5.8
14	17	6.3	19	49	616	37	12	2.3	.02	5.2	7.7	5.9
15	16	6.0	19	48	505	36	12	2.1	.01	5.6	7.3	5.9
16	15	6.2	19	46	343	34	13	2.1	.06	7.1	7.2	5.8
17	16	6.4	19	48	214	35	13	1.8	.73	6.8	7.3	5.2
18	16	6.6	19	60	155	36	13	2.0	1.5	6.7	7.7	4.8
19	17	7.1	19	67	126	35	12	3.0	3.2	6.6	9.3	4.6
20	17	7.9	20	66	116	33	10	2.6	4.1	6.5	9.2	4.5
21	16	8.6	20	e61	119	31	8.7	2.1	4.5	6.4	8.2	4.3
22	16	8.8	21	e60	114	36	7.1	2.0	4.3	5.9	7.8	4.9
23	16	8.7	20	e60	102	58	6.9	1.7	4.1	5.7	7.6	6.2
24	15	8.6	20	e59	91	63	6.6	1.5	4.0	5.6	7.2	6.1
25	15	8.8	20	58	84	53	6.2	1.7	3.4	7.2	7.2	6.1
26	14	8.9	20	54	78	45	5.9	1.8	2.9	14	7.2	6.9
27	14	9.2	21	51	75	39	5.3	1.6	1.9	13	7.0	24
28	13	10	22	50	69	34	4.7	1.7	.25	14	7.3	27
29	13	13	22	55	---	30	4.1	1.2	.27	11	7.5	11
30	13	15	22	59	---	27	3.4	.86	.32	10	7.4	8.2
31	12	---	21	90	---	24	---	.75	---	14	7.3	---
TOTAL	599	269.0	646	2118	8474	1438	345.9	77.71	38.94	194.89	588.4	226.8
MEAN	19.3	8.97	20.8	68.3	303	46.4	11.5	2.51	1.30	6.29	19.0	7.56
MAX	41	15	30	217	790	83	21	4.2	4.5	14	102	27
MIN	12	6.0	15	21	69	24	3.4	.75	.01	.79	7.0	4.3
CFSM	.21	.10	.22	.73	3.25	.50	.12	.03	.01	.07	.20	.08
IN.	.24	.11	.26	.84	3.38	.57	.14	.03	.02	.08	.23	.09

CAL YR 1984	TOTAL	58395.9	MEAN	160	MAX	1660	MIN	1.4	CFSM 1.71	IN.	23.28
WTR YR 1985	TOTAL	15016.64	MEAN	41.1	MAX	790	MIN	.01	CFSM .44	IN.	5.99

e Estimated

02091700 LITTLE CONTENTNEA CREEK NEAR FARMVILLE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/02	1125	WATER	0	9.03	42	122	7.10	14.0	15.0	5.3	970
84/11/09	1130	WATER	0	8.96	9	188	6.60	8.0		4.6	380
84/12/07	1200	WATER	0	9.75	29	130	7.10	3.0		6.6	90
85/01/03	1300	WATER	0	9.28	27	134	6.80	11.0	12.0	5.5	2000
85/02/11	1100	WATER	0	10.56	183	88	6.60	2.0		11.8	20
85/03/26	1015	WATER	0	9.41	45	94	7.20	8.0		9.0	550
85/04/15	1050	WATER	0	8.88	12	177	7.10	16.0	14.0	4.0	70
85/05/23	1100	WATER	0	8.25	2					1.8	130
85/06/27	1030	WATER	0	8.35	3	324	7.10	21.0		1.5	120
85/07/18	1115	WATER	0	8.73	6	354	7.30	23.0	19.0	4.2	190
85/08/20	1025	WATER	0.1	8.84	10	250		23.0		2.6	150
85/09/17	1545	WATER	0.1	8.67	5	296	7.20	18.0		1.6	30

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4-N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/02	1125	WATER	0	26	6	140	1.90	.070	.700	.350	.150
84/11/09	1130	WATER	0	56	2	180					
84/12/07	1200	WATER	0	36	4	160					
85/01/03	1300	WATER	0	38	6	150	.81	.070	.500	.520	.250
85/02/11	1100	WATER	0	9	3	120	1.50	.130	.400	.100	.040
85/03/26	1015	WATER	0	20	6	110	1.20	.040	.500	.270	.120
85/04/15	1050	WATER	0	40	7	160	2.10	.160	.800	.640	.300
85/05/23	1100	WATER	0		10	290	3.40	.180	1.200	2.600	1.400
85/06/27	1030	WATER	0	92	15	300	.41	.260	1.200	2.700	1.500
85/07/18	1115	WATER	0	90	2	300	3.10	.190	5.000	2.900	1.900
85/08/20	1025	WATER	0.1		4	230	1.20	.200	1.000	1.600	1.100
85/09/17	1545	WATER	0.1	124	3	280	.10	.360	1.000	4.100	2.500

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/02	1125	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/03	1300	WATER	0		20K	50K	20K	100K		100K	20
85/04/15	1050	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/18	1115	WATER	0		20K	50K	20	100K	.2K	100K	30

K Less than noted value.

02091836 NEUSE RIVER AT STREETS FERRY NEAR VANCEBORO, NC
(Radiochemical Station)

LOCATION.--Lat 35°12'20", long 77°07'40", Craven County, Hydrologic Unit 03020202, at bridge on Secondary Road 1400 at Streets Ferry, 1.4 mi above the Gut, and 7 mi south of Vanceboro.

DRAINAGE AREA.--4,040 mi^2.

PERIOD OF RECORD.--Water years 1955-66, 1969 to current year.

REMARKS.--Station operated as part of Radiochemical Network from October 1969 to present. Tritium determinations for December 1984 to September 1985 were not available at time of this publication. Salinity station prior to October 1966; chemical analysis and temperature values were determined on integrated samples collected three times daily from September 1954 to September 1957, and top (T) and bottom (B) samples collected once daily from October 1957 to September 1964. Daily records of specific conductance for water years 1954-64 in the files of the district office in Raleigh, NC. Records prior to water year 1958 published as Neuse River near Vanceboro.

WATER QUALITY DATA, AUGUST TO NOVEMBER 1984

DATE	TIME	TEMPERATURE (DEG C)	TRITIUM IN WATER MOLECULES (TU)	TRITIUM WATER MOLECULES COUNT ERROR (TU)
AUG				
01...	1815	23.0	48.1	1.8
SEP				
05...	1820	25.0	66.0	2.2
OCT				
01...	1840	16.0	35.5	1.3
NOV				
03...	1700	19.0	26.1	1.0

NEUSE RIVER BASIN

02091970 CREEPING SWAMP NEAR VANCEBORO, NC

LOCATION.--Lat 35°23'30", long 77°13'46", Craven County, Hydrologic Unit 03020202, on left bank at downstream side of bridge on State Highway 43, 1.0 mi upstream from mouth, and 7.9 mi northwest of Vanceboro.

DRAINAGE AREA.--27 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1971 to September 1985 (discontinued).

GAGE.--Water-stage recorder and concrete control with a parabolic shaped sharp-crested weir. Datum of gage is National Geodetic Vertical Datum of 1929 (Soil Conservation Service bench mark). Prior to Oct. 1, 1972, at datum, 16.60 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 35.7 ft^3/s, 17.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,810 ft^3/s Oct. 1, 1971, gage height, 24.53 ft present datum; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 7	1130	*221	*21.62				

No flow several days in May, June, and July.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	.05	1.5	e5.4	38	6.8	4.0	.65	.00	.00	1.1	3.6
2	11	.05	1.4	e7.6	58	7.3	3.2	.54	.00	.00	12	3.1
3	12	.05	2.8	e8.3	96	7.1	2.6	.48	.00	.00	25	2.8
4	13	.10	5.0	e8.4	89	6.6	2.0	.44	.00	.00	15	2.3
5	11	.53	5.4	e8.2	75	6.2	1.5	.37	.00	.00	8.0	1.9
6	9.7	1.3	8.0	e7.6	155	6.2	1.2	.30	.00	.00	7.8	1.5
7	8.7	2.2	7.1	e7.9	215	5.9	1.2	.22	.00	.00	6.3	1.2
8	7.8	2.6	5.4	e7.8	176	5.0	1.2	.16	.00	.00	3.9	1.0
9	6.9	2.6	5.1	e7.4	92	4.8	1.3	.13	.00	.00	4.1	.83
10	6.6	2.6	4.7	e6.0	51	4.4	1.6	.10	.00	.00	4.0	.69
11	6.3	2.6	4.6	e5.4	34	4.0	1.7	.09	.00	.00	2.9	.56
12	5.1	2.6	4.2	e5.0	45	4.0	1.8	.09	.00	.00	2.0	.46
13	1.7	2.6	5.6	e5.8	62	3.6	2.1	.07	.00	.00	1.5	.36
14	1.6	2.5	5.9	e8.5	67	3.8	2.4	.05	.00	.00	1.2	.28
15	1.6	2.4	5.3	e11	52	3.9	2.8	.04	.00	.00	1.4	.21
16	1.6	2.4	4.3	e10	35	4.0	3.2	.03	.00	.00	1.4	.16
17	1.5	2.4	3.9	e9.0	24	4.4	3.8	.02	.00	.00	3.7	.12
18	1.2	2.4	3.5	e8.0	17	4.4	3.5	.01	.00	.00	6.1	.09
19	.57	2.5	e3.0	e7.2	14	3.7	3.4	.00	.00	.00	32	.08
20	.20	2.4	e2.8	e12	13	3.5	3.5	.00	.00	.00	22	.06
21	.12	1.2	e2.6	e11	15	3.3	2.8	.00	.00	.00	14	.05
22	.08	1.1	e2.4	e10	14	7.8	2.3	.00	.00	.00	54	.06
23	.07	1.1	e2.2	e9.0	13	20	2.2	.00	.00	.08	45	.08
24	.07	1.1	e2.0	e8.0	13	19	2.0	.00	.00	9.3	23	.07
25	.06	.96	e1.9	e7.4	11	18	1.7	.00	.00	6.5	18	.06
26	.06	.84	e1.8	e6.9	9.3	17	1.5	.00	.00	9.8	13	.74
27	.05	.75	e1.7	e6.4	8.1	13	1.3	.00	.00	5.4	10	87
28	.05	.77	e1.6	e6.0	7.3	10	1.1	.00	.00	3.2	8.1	132
29	.05	.99	e1.5	e5.6	---	8.0	.94	.00	.00	2.7	6.2	145
30	.05	1.2	e1.4	e5.2	---	6.3	.78	.00	.00	2.0	4.7	95
31	.05	---	e1.9	e15	---	4.9	---	.00	---	1.1	4.0	---
TOTAL	118.68	46.89	110.5	247.0	1498.7	226.9	64.62	3.79	.00	40.08	361.4	481.36
MEAN	3.83	1.56	3.56	7.97	53.5	7.32	2.15	.12	.00	1.29	11.7	16.0
MAX	13	2.6	8.0	15	215	20	4.0	.65	.00	9.8	54	145
MIN	.05	.05	1.4	5.0	7.3	3.3	.78	.00	.00	.00	1.1	.05
CFSM	.14	.06	.13	.30	1.98	.27	.08	.00	.00	.05	.43	.59
IN.	.16	.06	.15	.34	2.06	.31	.09	.01	.00	.06	.50	.66

CAL YR 1984	TOTAL	12530.20	MEAN	34.2	MAX	1170	MIN	.00	CFSM	1.27	IN.	17.26
WTR YR 1985	TOTAL	3199.92	MEAN	8.77	MAX	215	MIN	.00	CFSM	.32	IN.	4.41

e Estimated

02091970 CREEPING SWAMP NEAR VANCEBORO, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-75, 1981 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1974 to June 1975.
WATER TEMPERATURE: July 1974 to September 1975.

INSTRUMENTATION.--Thermograph from April 1972 until September 1975.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

REMARKS.--Station operated as background station to define the effects of channelization on stream quality and quantity in the Chicod Creek basin.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water year 1975): Maximum daily, 120 microsiemens Nov. 6, 1974; minimum daily, 36 microsiemens Apr. 16, 18, 1975.
WATER TEMPERATURE (water year 1975): Maximum 27.0°C Aug. 18, 19, 24-27, 1975; minimum, 5.5°C on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
14...	1330	2.6	71	5.3	9.0	160	770	2.1	18	K28	K56
APR											
12...	0720	1.9	58	5.1	12.5	85	773	6.6	61	K30	K140
JUL											
25...	1530	7.0	108	5.2	20.5	150	695	2.8	34	--	--
AUG											
02...	1325	14	73	5.5	22.0	360	762	4.9	56	--	--

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV										
14...	20	8	5.7	1.5	4.8	31	.5	2.6	4.7	12
APR										
12...	14	8	3.6	1.1	4.5	39	.6	1.5	1.2	9.5
JUL										
25...	34	29	10	2.2	5.2	23	.4	2.3	29	6.3
AUG										
02...	23	16	6.4	1.6	4.0	26	.4	2.1	16	7.6

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
NOV										
14...	<.10	13	89	53	.12	.62	--	.020	<.10	<.10
APR										
12...	.10	5.1	34	31	.05	.17	--	<.010	<.10	<.10
JUL										
25...	<.10	7.4	91	66	.12	1.7	.86	.040	.90	.83
AUG										
02...	<.10	8.5	77	51	.10	2.9	--	<.010	<.10	.12

K Results based on colony count outside the acceptable range (non-ideal colony count).

02091970 CREEPING SWAMP NEAR VANCEBORO, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUSPENDED TOTAL (UG/L AS AS)
NOV 14...	1.2	.10	1.1	--	--	--	<.010	<.010	3	1
APR 12...	.50	.00	.50	--	--	--	.040	.010	1	0
JUL 25...	.60	--	--	1.5	6.6	--	.070	.090	1	0
AUG 02...	.90	.10	.80	--	--	.92	.070	<.010	2	1

DATE	ARSENIC DISSOLVED (UG/L AS AS)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
NOV 14...	2	<1	--	1	2800	1000	1800	3	0	3
APR 12...	1	17	15	2	1200	510	690	6	3	3
JUL 25...	1	4	0	4	990	630	360	3	0	3
AUG 02...	1	7	--	<1	1800	890	910	4	--	<1

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSNPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 14...	<.1	--	<.1	20	0	12	25	20	.14
APR 12...	.2	.0	.2	30	0	26	--	7	.04
JUL 25...	1.4	.1	1.3	10	0	14	18	23	.43
AUG 02...	<.1	--	--	30	20	8	17	28	1.1

02091970 CREEPING SWAMP NEAR VANCEBORO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
85/01/15	1225	WATER	0	20.67	22	43	6.20	2.0	7.2	10.6	130
85/02/08	1430	WATER	0	21.46	177	43	6.00	3.0		11.4	100
85/03/25	1230	WATER	0	20.49	18	50	7.00	12.0		10.2	160
85/04/03	1510	WATER	0	20.08	1	46	6.60	17.0	2.7	10.1	10
85/05/13	1100	WATER	0	19.54	.07	145	6.40	20.0		4.2	70
85/06/13	1000	WATER	0	17.97	0	102	6.40	24.0		.1	90
85/07/31	1430	WATER	0	19.94	1	117	5.40	22.0	10.0	1.0	40
85/08/07	1415	WATER	0.1	20.27	6	98	5.50	26.0		4.0	40
85/09/25	1140	WATER	0.1	19.52	.07	66	6.00	20.0		.5	70

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/15	1225	WATER	0	7	2	97	.01K	.020	.300	.040	.010K
85/02/08	1430	WATER	0	5	6	80					
85/03/25	1230	WATER	0	9	5	75					
85/04/03	1510	WATER	0	8	4	77	.01	.010K	.400	.090	.010K
85/05/13	1100	WATER	0	16	28	150					
85/06/13	1000	WATER	0		99	320					
85/07/31	1430	WATER	0	10	4	140	.03	.070	.060	.060	.020
85/08/07	1415	WATER	0.1		1	130					
85/09/25	1140	WATER	0.1		35	160					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/15	1225	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/03	1510	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/31	1430	WATER	0	10K	20K	50K	20K	100K	.3	100K	20K

K Less than noted value.

02092000 SWIFT CREEK NEAR VANCEBORO, NC

LOCATION.--Lat 35°20'42", long 77°11'45", Craven County, Hydrologic Unit 03020202, on left bank at downstream side of bridge on Secondary Road 1478, 2.5 mi upstream from bridge on State Highway 118, 2.5 mi downstream from Clayroot Swamp, and 3.5 mi northwest of Vanceboro.

DRAINAGE AREA.--182 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.07 ft below National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Jan. 17, 1951, nonrecording gage and Jan. 17, 1951 to Sept. 30, 1964, water-stage recorder at same site at datum 6.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. During 1964, the channel was canalized from a point 12.2 mi upstream to a point 2.5 mi downstream from the gage.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--35 years, 209 ft^3/s, 15.59 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,060 ft^3/s Sept. 22, 1955, gage height, 19.67 ft, present datum; no flow Aug. 8-29, Oct. 4 to Nov. 9, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1909 reached a stage of 22 ft, present datum, and flood in 1928 reached a stage of 17.7 ft, present datum, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft^3/s Feb. 7, gage height, 12.59 ft; minimum, 6.3 ft^3/s Sept. 22; minimum gage height, 4.78 ft June 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251	28	37	24	472	144	72	14	9.9	11	75	29
2	228	27	31	24	561	158	63	14	9.8	15	178	23
3	173	25	29	26	898	161	57	14	9.8	18	260	20
4	138	25	35	104	732	145	52	14	9.6	17	167	17
5	113	32	34	315	583	137	47	14	9.6	16	98	15
6	96	36	48	240	1090	124	42	14	11	16	61	13
7	84	33	58	173	1550	109	40	13	11	17	38	12
8	77	30	53	138	1260	101	35	13	12	17	26	11
9	70	27	49	118	830	98	32	13	11	14	30	9.9
10	65	26	45	105	557	92	29	13	10	12	34	9.1
11	60	25	44	183	408	86	28	13	9.5	75	30	8.4
12	56	25	43	197	643	84	28	13	9.1	105	23	8.0
13	53	24	41	164	1160	79	28	13	8.8	53	17	7.6
14	49	23	38	142	898	74	27	13	8.5	27	13	7.4
15	46	23	36	129	627	71	28	12	8.3	18	9.9	7.1
16	43	23	35	113	452	64	29	12	8.7	13	8.2	6.9
17	42	24	34	109	348	63	44	12	9.5	13	9.2	6.6
18	40	24	34	160	291	64	48	12	11	11	13	6.5
19	39	24	34	170	256	62	39	11	12	10	347	6.5
20	38	24	32	158	251	58	32	11	13	9.6	339	6.5
21	36	26	31	128	287	53	27	11	14	9.4	186	6.5
22	34	26	31	107	279	75	24	11	14	9.4	712	6.6
23	33	27	30	103	259	192	22	13	11	12	716	7.1
24	32	27	29	99	242	187	20	11	9.9	104	396	7.1
25	31	26	28	98	217	161	18	11	9.3	84	231	7.1
26	30	26	27	96	190	136	17	11	8.6	177	146	9.6
27	29	26	26	88	175	118	16	11	8.2	136	102	597
28	29	27	26	87	163	105	16	11	7.9	111	77	856
29	28	32	26	90	---	95	15	10	7.9	94	59	607
30	29	39	26	95	---	87	15	9.8	8.8	95	45	403
31	30	---	25	205	---	79	---	9.8	---	91	36	---
TOTAL	2102	810	1095	3988	15679	3262	990	377.6	301.7	1410.4	4482.3	2737.5
MEAN	67.8	27.0	35.3	129	560	105	33.0	12.2	10.1	45.5	145	91.2
MAX	251	39	58	315	1550	192	72	14	14	177	716	856
MIN	28	23	25	24	163	53	15	9.8	7.9	9.4	8.2	6.5
CFSM	.37	.15	.19	.71	3.08	.58	.18	.07	.06	.25	.80	.50
IN.	.43	.17	.22	.82	3.20	.67	.20	.08	.06	.29	.92	.56

CAL YR 1984 TOTAL 98992 MEAN 270 MAX 4070 MIN 14 CFSM 1.48 IN. 20.23
WTR YR 1985 TOTAL 37235.5 MEAN 102 MAX 1550 MIN 6.5 CFSM .56 IN. 7.61

02092000 SWIFT CREEK NEAR VANCEBORO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/08	1130	WATER	0	7.25	77	139	6.80	17.0	20.0	6.8	80
84/11/05	1200	WATER	0	6.62	33	212	7.00	16.0		5.7	230
84/12/11	1000	WATER	0	6.57	44	179	7.20	6.0		9.8	430
85/01/15	1115	WATER	0	7.47	134	145	6.90	3.0	16.0	11.1	240
85/02/08	1450	WATER	0	11.80	1220	85	6.40	4.0		10.8	140
85/03/14	1545	WATER	0	6.96	74	159	7.10	14.0		7.3	20
85/04/02	1130	WATER	0	6.80	92	168	7.20	19.0	7.4	6.7	10K
85/05/13	1145	WATER	0	5.30	16	212	6.60	22.0		4.2	40
85/06/13	1030	WATER	0	4.90	8	230	7.40	25.0		4.7	20
85/07/31	1500	WATER	0	6.85	92	150	6.80	25.0	41.0	4.3	40
85/08/07	1445	WATER	0.1	6.31	36	150	6.50	28.0		5.6	110
85/09/25	1220	WATER	0.1	5.04	7	216	7.30	21.0		6.1	130

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/08	1130	WATER	0	31	16	160	1.60	.430	.800	.170	.040
84/11/05	1200	WATER	0	66	14	170					
84/12/11	1000	WATER	0	52	5	160					
85/01/15	1115	WATER	0	23	3	140	1.60	.610	.900	.100	.050
85/02/08	1450	WATER	0	10	17	110	1.60	.400	.800	.090	.020
85/03/14	1545	WATER	0	34	25	150	1.20	.170	.400	.100	.020
85/04/02	1130	WATER	0	41	20	160	.99	.890	1.200	.220	.060
85/05/13	1145	WATER	0	67	8	170	.37	.110	.400	.120	.030
85/06/13	1030	WATER	0		27	210	.02	.140	1.400	.220	.030
85/07/31	1500	WATER	0	45	18	150	.85	1.400	1.800	.290	.130
85/08/07	1445	WATER	0.1	30	12	160	1.20	.260	.900	.190	.060
85/09/25	1220	WATER	0.1	114	9	150	.47	.080	.300	.100	.030

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/08	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/15	1115	WATER	0		20K	50K	20K	200	.2K	100K	20
85/04/02	1130	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/31	1500	WATER	0		20K	50K	20K	100K	.4	100K	20K

K Less than noted value.

NEUSE RIVER BASIN

02092500 TRENT RIVER NEAR TRENTON, NC

LOCATION.--Lat 35°03'54", long 77°27'24", Jones County, Hydrologic Unit 03020204, on left bank 50 ft downstream from Free Bridge on Secondary Road 1129, 800 ft downstream from Little Chinquapin Branch, 1.5 mi southwest of Phillips Crossroads, and 6 mi west of Trenton.

DRAINAGE AREA.--168 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 19.15 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 21, 1951, nonrecording gage on bridge 50 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--34 years, 197 ft^3/s, 15.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,100 ft^3/s Sept. 21, 1955, gage height, 17.84 ft; minimum, 1.1 ft^3/s Oct. 20, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 17.3 ft, discharge, 7,600 ft^3/s, from information provided by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 952 ft^3/s Feb. 15, gage height, 11.32 ft; minimum, 1.3 ft^3/s several days in June, July and Sept., gage height 2.04 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	27	35	34	196	183	108	15	5.2	1.9	35	4.2
2	260	26	38	33	299	183	91	14	4.7	1.8	41	3.4
3	300	26	40	35	378	185	78	14	4.2	1.7	74	2.9
4	301	27	55	49	434	186	69	13	3.9	1.5	66	2.4
5	250	38	69	75	487	171	61	13	3.6	1.4	44	1.9
6	179	50	84	100	586	150	56	13	4.3	1.5	29	1.6
7	134	53	97	113	681	130	52	12	3.9	1.5	22	1.5
8	105	48	106	114	775	112	50	11	3.8	1.5	17	1.5
9	83	44	104	106	781	98	45	11	3.5	1.4	20	1.5
10	69	42	96	91	685	90	41	12	3.3	1.3	20	1.5
11	58	40	89	97	563	81	38	11	3.0	1.4	18	1.5
12	50	36	83	106	526	74	36	10	2.6	1.5	15	1.5
13	43	32	76	109	592	68	34	9.8	2.6	1.5	11	1.5
14	38	28	69	103	802	62	37	9.3	2.4	1.5	8.5	1.5
15	34	25	63	96	934	57	45	8.6	2.3	1.4	6.5	1.5
16	31	23	58	88	886	51	50	8.8	2.7	1.5	5.0	1.5
17	28	22	55	82	724	50	59	9.5	2.9	2.0	4.9	1.5
18	26	21	53	101	563	58	64	8.4	2.5	1.9	5.5	1.5
19	25	20	51	125	434	61	61	7.5	2.4	1.4	26	1.5
20	24	22	49	136	332	57	55	6.9	2.3	1.3	92	1.5
21	24	22	47	132	299	54	49	6.5	2.2	1.3	86	1.5
22	22	23	46	114	306	81	42	7.8	2.1	1.3	53	1.6
23	21	23	44	96	307	208	36	11	1.8	1.3	33	1.6
24	19	22	43	86	292	270	31	10	1.6	1.3	23	1.6
25	18	22	41	81	266	298	27	12	1.6	2.1	16	1.6
26	17	22	39	79	238	305	24	12	1.6	2.9	12	2.9
27	16	21	38	75	214	285	21	11	1.5	9.0	9.3	23
28	16	22	36	70	199	248	19	9.3	1.4	18	7.8	64
29	17	24	36	76	---	201	17	7.7	1.3	23	6.5	79
30	21	28	36	84	---	161	15	6.4	1.9	31	5.4	65
31	26	---	35	103	---	130	---	5.7	---	43	4.7	---
TOTAL	2445	879	1811	2789	13779	4348	1411	317.2	83.1	165.1	817.1	279.2
MEAN	78.9	29.3	58.4	90.0	492	140	47.0	10.2	2.77	5.33	26.4	9.31
MAX	301	53	106	136	934	305	108	15	5.2	43	92	79
MIN	16	20	35	33	196	50	15	5.7	1.3	1.3	4.7	1.5
CFSM	.47	.17	.35	.54	2.93	.83	.28	.06	.02	.03	.16	.06
IN.	.54	.19	.40	.62	3.05	.96	.31	.07	.02	.04	.18	.06

CAL YR 1984 TOTAL 66439.7 MEAN 182 MAX 1460 MIN 3.5 CFSM 1.08 IN. 14.71
WTR YR 1985 TOTAL 29123.7 MEAN 79.8 MAX 934 MIN 1.3 CFSM .47 IN. 6.45

02092500 TRENT RIVER NEAR TRENTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/09	1200	WATER	0			106	7.00	16.0	5.5	8.0	40
84/11/13	1100	WATER	0	3.33	31	117	6.80	10.0		8.0	120
84/12/10	0930	WATER	0	4.66	96	60		2.5		10.0	20
85/01/24	1230	WATER	0	4.42	86	90		.0	3.2	13.0	70
85/02/06	1400	WATER	0	9.58	595	50		3.0		10.3	110
85/03/13	1515	WATER	0	4.30	68	112	7.20	13.0		7.5	30
85/05/13	1315	WATER	0	2.40	9	202	7.00	22.0		6.7	10
85/06/13	1240	WATER	0	2.11	2	245	7.60	24.0		6.9	30
85/07/16	1350	WATER	0	2.05	1	270	7.00	25.0	5.5	6.4	20
85/08/08	1130	WATER	0.1	2.61	16	194	6.90	21.0		5.1	60

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/09	1200	WATER	0	38	7	130	.50	.020	.400	.050	.010
84/11/13	1100	WATER	0	44	6	150					
84/12/10	0930	WATER	0		2	120					
85/01/24	1230	WATER	0		1	97	.49	.050	.300	.040	.010
85/02/06	1400	WATER	0		5	100	.53	.010	.300	.050	.010
85/03/13	1515	WATER	0	38	2	140	.62	.020	.300	.060	.020
85/05/13	1315	WATER	0	75	14	120	.83	.040	.300	.100	.040
85/06/13	1240	WATER	0		5	200	.45	.060	.200	.090	.020
85/07/16	1350	WATER	0	86	6	170	.07	.050	.400	.100	.030
85/08/08	1130	WATER	0.1	34	7	170	.56	.050	.500	.100	.030

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/09	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/24	1230	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/16	1350	WATER	0		20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02093229 HEWLETTS CREEK AT SECONDARY ROAD 1102 NEAR WILMINGTON, NC

LOCATION.--Lat 34°11'28", long 77°53'32", New Hanover County, Hydrologic Unit 03030001, on right bank 50 ft upstream from culvert on Secondary Road 1102, and 3.8 mi southeast of Wilmington.

DRAINAGE AREA.--1.98 mi^2.

PERIOD OF RECORD.--November 1976 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--8 years, 3.90 ft^3/s, 26.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 847 ft^3/s July 24, 1982, gage height, 5.77 ft from rating curve extended above 150 ft^3/s; no flow for part of July 26, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 6	unknown	*unknown	*unknown	Sept. 11	1700	147	2.83

Minimum discharge, 0.61 ft^3/s July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	2.3	1.7	1.7	e1.6	3.2	1.5	1.1	1.0	1.3	4.8	3.2
2	8.0	3.6	1.7	1.7	e3.0	3.1	1.4	1.2	.95	1.2	3.7	2.7
3	7.0	2.5	2.8	2.9	e2.0	2.9	1.5	3.5	.86	.97	3.1	2.5
4	5.9	2.7	1.7	2.0	e1.6	2.9	1.4	1.4	.86	.92	2.6	2.5
5	5.0	2.5	2.2	1.7	e2.0	2.9	1.4	1.2	.89	.86	2.3	2.2
6	4.6	2.3	2.1	1.5	e60	2.7	1.5	1.2	1.6	.87	2.2	1.6
7	4.2	2.0	2.0	1.5	e20	2.6	1.2	1.2	1.0	.86	2.0	1.5
8	3.5	2.0	2.0	1.5	e10	2.7	1.2	1.1	1.4	.84	2.3	1.7
9	3.5	2.0	1.9	1.3	e8.0	2.9	1.1	1.5	.94	.78	2.0	1.7
10	3.3	1.9	1.9	1.5	e7.0	2.7	1.1	1.3	.87	.73	2.0	1.9
11	3.2	1.8	1.8	1.3	e6.0	2.8	1.1	1.4	.86	.73	1.9	17
12	3.2	1.7	1.8	1.3	e10	3.0	1.2	1.4	.86	.90	1.7	6.0
13	3.2	1.9	2.0	1.3	e5.0	3.1	1.3	1.4	.78	.83	1.6	3.4
14	3.1	2.0	1.9	1.3	e3.0	3.2	1.7	1.2	.73	.75	1.5	2.7
15	2.9	1.9	2.0	1.3	e2.6	3.2	1.4	1.1	.76	.73	1.5	2.3
16	2.9	1.9	2.0	1.3	e2.4	2.9	1.6	1.2	3.3	.86	1.5	2.2
17	3.0	1.8	2.3	1.9	e2.2	3.7	1.4	1.1	1.2	1.1	1.5	1.8
18	3.2	1.8	2.3	1.5	e2.0	2.8	1.3	1.0	1.1	1.1	1.6	1.8
19	3.2	1.8	2.3	1.5	e1.8	2.6	1.3	.97	1.0	.85	1.6	1.9
20	3.2	2.0	2.5	1.4	e7.0	2.6	1.3	.94	.96	.85	1.9	1.7
21	3.0	1.9	2.3	e1.4	e6.0	2.6	1.3	1.0	.87	.83	2.3	1.7
22	2.8	1.7	2.3	e1.3	e5.0	7.4	1.2	1.5	.87	.79	1.9	3.0
23	2.4	1.7	2.3	e1.3	e4.6	3.2	1.1	1.2	.86	.80	1.5	2.2
24	2.3	1.7	2.3	e1.3	e4.0	2.7	1.1	1.1	.86	8.5	1.5	1.9
25	2.3	1.7	2.3	e1.2	e3.4	2.5	1.1	1.0	.95	15	1.6	1.6
26	2.3	1.7	2.3	e1.2	e3.0	2.1	1.1	.98	.92	4.3	3.0	4.8
27	2.3	1.7	2.7	e1.2	e3.6	1.7	1.2	.96	.79	2.7	1.6	7.4
28	2.4	2.0	2.1	e1.2	3.2	1.7	1.4	.93	.64	16	1.5	3.1
29	2.8	1.9	2.0	e1.6	---	1.7	1.2	1.0	.66	22	1.6	2.5
30	2.5	1.7	1.7	e1.3	---	1.5	1.1	1.2	7.8	12	9.2	2.3
31	2.3	---	1.7	e2.0	---	1.5	---	1.0	---	6.8	4.4	---
TOTAL	115.5	60.1	64.9	46.4	190.0	87.1	38.7	38.28	37.14	107.75	73.4	92.8
MEAN	3.73	2.00	2.09	1.50	6.79	2.81	1.29	1.23	1.24	3.48	2.37	3.09
MAX	12	3.6	2.8	2.9	60	7.4	1.7	3.5	7.8	22	9.2	17
MIN	2.3	1.7	1.7	1.2	1.6	1.5	1.1	.93	.64	.73	1.5	1.5
CFSM	1.88	1.01	1.06	.76	3.43	1.42	.65	.62	.63	1.76	1.20	1.56
IN.	2.17	1.13	1.22	.87	3.57	1.64	.73	.72	.70	2.02	1.38	1.74

CAL YR 1984	TOTAL	1922.78	MEAN	5.25	MAX	383	MIN	.59	CFSM	2.65	IN.	36.12
WTR YR 1985	TOTAL	952.07	MEAN	2.61	MAX	60	MIN	.64	CFSM	1.32	IN.	17.89

e Estimated

0209330990 BROOKS LAKE TRIBUTARY NEAR BROWNS SUMMIT, NC

LOCATION.--Lat 35°13'40", long 79°43'20", Guilford County, Hydrologic Unit 03030002, on left bank, 0.2 mi upstream from mouth, on General Green Scout Reservation, and 1.1 mi northwest of Browns Summit.

DRAINAGE AREA.--0.06 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1.30 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Jan. 3	1245	1.30	1.80	Feb. 2	0100	*1.61	*1.87
Jan. 4	1045	1.30	1.80				

Minimum discharge, 0.02 ft³/s July 21, 22, 23, many days in September; minimum gage height, 1.18 ft July 22, 23, Sept. 25, 27, 28, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR NOVEMBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		e.06	.08	.06	.62	.10	.06	.03	.06	.05	.04	.05
2		e.06	.08	.09	.71	.09	.06	.03	.06	.04	.04	.05
3		e.06	.09	.66	.19	.09	.06	.04	.06	.04	.05	.04
4		e.06	.08	.63	.14	.09	.06	.03	.06	.05	.06	.04
5		e.06	.14	.23	.13	.09	.06	.03	.06	.05	.04	.04
6		e.06	.13	.13	.15	.08	.06	.03	.05	.04	.04	.03
7		.06	.10	.11	.15	.08	.06	.03	.06	.04	.04	.03
8		.06	.09	.10	.13	.09	.07	.03	.05	.04	.05	.02
9		.06	.08	.09	.12	.09	.07	.04	.05	.04	.05	.02
10		.06	.06	.08	.12	.09	.06	.04	.05	.05	.04	.02
11		.07	.06	.08	.11	.09	.07	.04	.06	.04	.04	.02
12		.06	.07	.07	.39	.09	.06	.04	.05	.04	.04	.04
13		.06	.06	.07	.15	.09	.06	.03	.05	.05	.03	.04
14		.06	.06	.07	.13	.08	.07	.03	.04	.04	.03	.04
15		.06	.06	.07	.11	.07	.06	.04	.04	.05	.03	.03
16		.06	.06	.07	.09	.07	.06	.04	.05	.04	.03	.03
17		.06	.06	.07	.09	.07	.05	.03	.04	.06	.06	.03
18		.06	.06	.07	.08	.07	.04	.03	.04	.05	.08	.02
19		.09	.06	.07	.08	.07	.04	.03	.04	.05	.05	.02
20		.08	.06	.07	.08	.07	.04	.03	.04	.05	.05	.02
21		.08	.06	.06	.08	.07	.04	.05	.04	.03	.08	.02
22		.06	.07	.06	.08	.10	.04	.08	.04	.02	.06	.03
23		.06	.06	.06	.08	.10	.04	.07	.04	.03	.05	.02
24		.06	.06	.06	.08	.09	.04	.06	.04	.03	.05	.03
25		.06	.06	.06	.10	.08	.04	.06	.04	.09	.06	.02
26		.06	.06	.06	.15	.08	.04	.05	.03	.04	.08	.03
27		.07	.06	.06	.13	.08	.04	.06	.03	.09	.08	.02
28		.15	.06	.06	.11	.08	.04	.06	.03	.11	.07	.02
29		.08	.06	.06	---	.08	.04	.06	.05	.06	.06	.02
30		.08	.06	.06	---	.08	.03	.06	.04	.05	.06	.02
31		---	.06	.10	---	.07	---	.06	---	.04	.05	---
TOTAL		2.02	2.21	3.59	4.58	2.57	1.56	1.34	1.39	1.50	1.59	.86
MEAN		.07	.07	.12	.16	.08	.05	.04	.05	.05	.05	.03
MAX		.15	.14	.66	.71	.10	.07	.08	.06	.11	.08	.05
MIN		.06	.06	.06	.08	.07	.03	.03	.03	.02	.03	.02

e Estimated

0209330990 BROOKS LAKE TRIBUTARY NEAR BROWNS SUMMIT, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June to September 1985.

REMARKS.--Station operated as part of a monitoring network for defining effects of land-management practices on water chemistry of Piedmont streams. Miscellaneous organic analyses are available in files of district office in Raleigh, NC.

WATER QUALITY DATA, JUNE TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
JUN												
13...	1600	.04	55	7.0	16.0	739	7.2	--	44	.30	--	.070
JUL												
16...	1700	.03	70	6.1	18.5	750	7.6	1.7	76	--	--	.080
AUG												
14...	0930	.03	63	7.2	18.0	744	7.2	1.4	78	.30	--	<.010
17...	2310	.14	55	6.6	--	--	--	2.4	56	<.10	--	.020
17...	2400	.21	47	6.1	--	--	--	2.0	31	.10	--	.040
18...	0045	.31	39	5.9	--	--	--	1.8	62	<.10	--	.060
18...	0115	.22	47	5.8	--	--	--	1.7	--	<.10	--	.040
18...	0145	.16	54	5.9	--	--	--	1.7	68	<.10	--	.040
SEP												
03...	1230	.04	64	6.3	18.5	749	10.8	--	39	.60	4.0	.040

DATE	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)
JUN											
13...	--	.23	.30	--	.60	2.7	.080	.25	.080	.100	--
JUL											
16...	--	.22	.30	--	--	--	.100	.31	.100	.070	--
AUG											
14...	--	--	.20	--	.50	2.2	.100	.31	.110	.090	--
17...	--	1.3	1.3	--	--	--	.330	1.0	.090	.130	--
17...	--	2.6	2.6	--	2.7	12	.120	.37	.070	.100	--
18...	--	1.3	1.4	--	--	--	.180	.55	.050	.120	--
18...	--	.96	1.0	--	--	--	.240	.74	.090	.090	--
18...	--	1.6	1.6	--	--	--	.120	.37	.070	.130	--
SEP											
03...	7.0	.26	.30	780	.90	4.0	.120	.37	--	.090	190

0209331325 CANDY CREEK AT SECONDARY ROAD 2700 NEAR MONTICELLO, NC

LOCATION.--Lat 36°14'02", long 79°39'43", Guilford County, Hydrologic Unit 03030002, on right bank 70 ft upstream from bridge on Secondary Road 2700, and 1.2 mi northeast of Monticello.

DRAINAGE AREA.--1.10 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 730 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 4	1200	23	2.88	Aug. 26	1345	*42	*3.41
Feb. 2	0115	31	3.10	Aug. 27	2000	32	3.14
July 27	2030	29	3.06				

Minimum discharge, 0.08 ft^3/s June 26, 27, 28, gage height, 1.40 ft; minimum daily, 0.09 ft^3/s June 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.28	.34	.52	.50	7.0	.95	.87	.25	.19	.35	1.4	.71
2	e.28	.34	.54	1.0	13	.89	.85	.27	.18	.26	.59	.44
3	.28	.28	1.0	8.6	3.3	.81	.83	.35	.19	.19	.29	.40
4	.30	.30	.60	10	1.8	.80	.61	.33	.20	.15	.27	.32
5	.29	.34	2.7	3.8	1.8	.77	.55	.30	.19	.17	.53	.31
6	.28	.29	2.8	1.8	2.6	.67	.57	.26	.19	.18	.33	.35
7	.28	.31	1.1	1.3	1.9	.66	.52	.24	.28	.17	.21	.36
8	.27	.33	.85	1.0	1.2	.68	.51	.23	.25	.15	1.3	.31
9	.25	.31	.74	.84	.99	.68	.51	.22	.20	.15	.48	.26
10	.24	.33	.69	.78	.93	.62	.51	.22	.17	.13	.35	.25
11	.27	.48	.64	.72	.93	.64	.52	.22	.36	.19	.30	.24
12	.26	.36	.61	.59	5.4	.63	.51	.25	.33	.13	.24	.21
13	.26	.34	.59	.58	2.1	.57	.50	.21	.23	.99	.18	.21
14	.25	.34	.56	.59	1.3	.56	.51	.19	.21	1.0	.17	.21
15	.24	.36	.56	.52	1.1	.54	.54	.31	.18	.24	.15	.22
16	.25	.36	.56	.51	.94	.54	.56	1.1	.20	.18	.14	.22
17	.27	.35	.56	.63	.89	.57	.49	.71	.18	.18	.61	.21
18	.29	.37	.56	.59	.81	.51	.45	.47	.15	.18	7.6	.21
19	.28	.70	.57	.53	.88	.59	.43	.30	.13	.18	1.7	.21
20	.26	.47	.56	.52	.78	.57	.40	.24	.12	.18	1.3	.21
21	.24	.40	.59	.51	.75	.60	.35	.29	.13	.18	1.6	.21
22	.32	.38	.66	.51	.75	1.2	.34	.75	.11	.14	1.2	.21
23	.33	.42	.63	.51	.75	1.5	.32	.80	.11	.11	.58	.21
24	.30	.38	.61	.53	.77	1.1	.32	.49	.12	.12	.78	.21
25	.30	.37	.61	.53	.91	.92	.32	.42	.10	2.8	1.5	.19
26	.32	.37	.56	.43	2.6	.80	.28	.30	.10	1.1	8.8	.19
27	.29	.37	.59	.44	1.4	.79	.29	.22	.09	3.7	7.4	.19
28	.30	1.8	.57	.49	1.1	.77	.29	.20	.10	6.4	5.1	.18
29	.52	.84	.54	.50	---	.67	.26	.20	1.4	1.2	1.9	.16
30	.38	.57	.52	.50	---	.79	.25	.20	.57	.55	1.5	.17
31	.36	---	.50	1.1	---	.87	---	.20	---	1.9	1.1	---
TOTAL	9.04	13.20	23.69	41.45	58.68	23.26	14.26	10.74	6.96	23.55	49.60	7.78
MEAN	.29	.44	.76	1.34	2.10	.75	.48	.35	.23	.76	1.60	.26
MAX	.52	1.8	2.8	10	13	1.5	.87	1.1	1.4	6.4	8.8	.71
MIN	.24	.28	.50	.43	.75	.51	.25	.19	.09	.11	.14	.16

WTR YR 1985 TOTAL 282.21 MEAN .77 MAX 13 MIN .09

e Estimated

0209331325 CANDY CREEK AT SECONDARY ROAD 2700 NEAR MONTICELLO, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June to September 1985.

REMARKS.--Station operated as part of a monitoring network for defining effects of land-management practices on water chemistry of Piedmont streams. Miscellaneous organic analyses are available in files of district office in Raleigh, NC.

WATER QUALITY DATA, JUNE TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
JUN												
13...	1500	.23	65	7.0	19.0	739	8.0	--	39	.70	--	.160
29...	1910	7.8	60	--	--	--	--	13	--	.90	--	.890
29...	1915	8.4	54	--	--	--	--	8.3	--	.80	--	.400
29...	1945	8.0	51	--	--	--	--	7.8	--	.90	--	.460
JUL												
16...	1450	.18	102	6.9	23.0	750	6.7	4.3	69	.20	--	.020
AUG												
14...	0745	.19	70	6.7	21.0	744	7.0	2.3	50	.80	--	.110
18...	0155	14	60	6.7	--	--	--	5.7	--	.40	--	.320
18...	0200	15	59	6.7	--	--	--	6.2	--	.50	--	.300
18...	0230	17	53	6.5	--	--	--	--	--	.30	--	.210
18...	0300	20	50	6.6	--	--	--	5.8	42	.30	--	.210
18...	0330	19	43	6.5	--	--	--	4.5	--	.30	--	.140
18...	0400	23	44	6.5	--	--	--	4.9	--	.30	--	.230
26...	1215	10	50	7.5	--	--	--	5.1	35	.30	--	.150
26...	1315	29	34	--	--	--	--	4.9	--	.30	--	.130
26...	1345	42	33	--	--	--	--	4.7	--	.30	--	.140
26...	1400	39	33	--	--	--	--	4.2	--	.30	--	.160
SEP												
03...	1315	.42	69	6.4	22.0	749	11.3	2.0	34	.70	47	.130

DATE	NITRO-GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)
JUN											
13...	--	.44	.60	--	1.3	5.8	.090	.28	.090	.070	--
29...	--	12	13	--	14	62	1.40	4.3	.160	.350	--
29...	--	9.6	10	--	11	48	.910	2.8	.110	.260	--
29...	--	11	11	--	12	53	2.70	8.3	.120	.490	--
JUL											
16...	--	1.5	1.5	--	1.7	7.5	.080	.25	.060	.040	--
AUG											
14...	--	.39	.50	--	1.3	5.8	.070	.21	.060	.060	--
18...	--	2.1	2.4	--	2.8	12	.590	1.8	.150	.300	--
18...	--	3.6	3.9	--	4.4	19	.980	3.0	.160	.350	--
18...	--	3.1	3.3	--	3.6	16	1.00	3.1	.200	.220	--
18...	--	2.9	3.1	--	3.4	15	.670	2.1	.220	.320	--
18...	--	3.1	3.2	--	3.5	15	.260	.80	.150	.230	--
18...	--	2.8	3.0	--	3.3	15	.810	2.5	.180	.340	--
26...	--	4.7	4.8	--	5.1	23	.240	.74	.210	.220	--
26...	--	3.2	3.3	--	3.6	16	.260	.80	.230	.230	--
26...	--	3.2	3.3	--	3.6	16	.240	.74	.170	.210	--
26...	--	3.2	3.4	--	3.7	16	.220	.67	.180	.190	--
SEP											
03...	5.0	.27	.40	360	1.1	4.9	.090	.28	.090	.060	53

02093800 REEDY FORK NEAR OAK RIDGE, NC

LOCATION.--Lat 36°10'22", long 79°57'12", Guilford County, Hydrologic Unit 03030002, on left bank at downstream side of bridge on Secondary Road 2128, 0.8 mi downstream from Beaver Creek, and 2 mi east of Oak Ridge.

DRAINAGE AREA.--20.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 771.30 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1955, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at medium and low flows caused by mill upstream.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--30 years, 23.9 ft^3/s, 15.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,950 ft^3/s Oct. 10, 1959, gage height, 10.94 ft, from rating curve extended above 1,500 ft^3/s on basis of contracted-opening measurement of peak flow; maximum gage height, 12.41 ft Sept. 22, 1979; minimum, 1.2 ft^3/s Aug. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	1000	*378	*7.42	No other peak greater than base discharge.			

Minimum discharge, 3.7 ft^3/s July 22, gage height, 2.74 ft; minimum daily 4.3 ft^3/s July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	13	14	14	120	24	16	10	9.4	7.8	19	9.7
2	18	14	13	16	255	23	15	11	8.7	7.7	13	9.5
3	16	13	25	71	76	21	15	15	8.8	6.8	9.5	8.9
4	14	15	16	126	45	20	15	11	8.5	6.6	8.5	8.6
5	13	17	31	65	40	19	15	11	10	6.0	7.7	8.0
6	13	14	43	36	48	16	16	10	21	6.5	7.6	7.6
7	14	13	20	27	44	15	15	9.7	16	6.1	7.8	7.6
8	15	13	17	22	30	17	14	10	23	5.7	8.4	7.2
9	15	13	16	19	25	17	14	9.3	11	5.6	8.2	7.2
10	14	13	16	18	23	16	13	10	9.9	5.7	8.1	7.2
11	14	17	16	17	23	16	14	11	11	5.9	7.4	7.0
12	14	14	16	16	83	16	14	11	17	5.4	7.0	6.4
13	13	13	15	15	48	15	14	10	9.8	8.9	6.5	6.3
14	13	12	15	16	32	15	14	11	8.7	11	6.2	6.1
15	13	12	15	15	27	15	15	11	8.2	7.3	5.7	6.3
16	13	13	15	14	23	14	23	66	8.8	6.6	5.4	6.1
17	13	13	15	17	22	15	16	27	9.1	6.1	12	6.0
18	13	14	15	17	21	14	14	14	8.1	5.3	96	6.1
19	13	22	15	16	20	13	13	11	7.9	5.0	25	5.9
20	13	17	15	13	20	14	13	10	7.0	4.8	13	6.0
21	13	14	16	12	18	14	12	10	6.9	4.5	40	6.0
22	13	12	18	12	18	24	12	20	6.9	4.3	20	6.0
23	14	13	16	14	18	26	11	64	6.9	4.8	12	5.8
24	14	13	15	14	18	20	11	25	6.6	5.6	15	5.9
25	14	12	14	15	20	17	13	17	7.0	50	23	6.0
26	14	12	14	14	55	16	11	13	6.9	21	34	5.7
27	14	12	14	15	33	16	11	11	5.9	12	35	5.5
28	13	28	14	15	25	15	12	11	5.9	32	42	4.9
29	14	23	15	15	---	15	11	10	5.8	15	15	5.3
30	14	15	14	15	---	15	11	10	6.6	13	13	5.1
31	14	---	14	28	---	16	---	10	---	20	11	---
TOTAL	460	439	527	739	1230	529	413	490.0	287.3	313.0	542.0	199.9
MEAN	14.8	14.6	17.0	23.8	43.9	17.1	13.8	15.8	9.58	10.1	17.5	6.66
MAX	45	28	43	126	255	26	23	66	23	50	96	9.7
MIN	13	12	13	12	18	13	11	9.3	5.8	4.3	5.4	4.9
CFSM	.72	.71	.83	1.16	2.13	.83	.67	.77	.47	.49	.85	.32
IN.	.83	.79	.95	1.33	2.22	.96	.75	.88	.52	.57	.98	.36

CAL YR 1984	TOTAL	14608	MEAN	39.9	MAX	1250	MIN	12	CFSM	1.94	IN. 26.38
WTR YR 1985	TOTAL	6169.2	MEAN	16.9	MAX	255	MIN	4.3	CFSM	.82	IN. 11.14

02093800 REEDY FORK NEAR OAK RIDGE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/04	1250	WATER	0	3.33	14	72	7.10	15.0	8.0	9.1	350
84/11/13	1230	WATER	0	3.42	18	67	7.10	8.0		10.6	220
84/12/03	1230	WATER	0	3.68	28	67	7.10	8.0		11.9	10K
85/01/22	1350	WATER	0	3.21	12	60	6.70	.0	9.3	12.0	70
85/02/27	1215	WATER	0	3.78	34	62	7.00	13.0		9.8	350
85/03/26	1225	WATER	0	3.38	17	63	6.80	12.0		10.5	100
85/04/22	0905	WATER	0	3.13	12	73	7.20	17.0	8.4	9.1	220
85/05/20	0855	WATER	0	3.12	11	61	7.10	16.0		9.1	420
85/06/12	1140	WATER	0	3.30	4	75	6.70	22.0		7.5	1400
85/07/11	0905	WATER	0	2.88	6	86	7.10	20.0	13.0	8.0	980
85/08/12	0845	WATER	0.1	2.92	7	81	7.10	21.0		8.0	550
85/09/18	0845	WATER	0.1	2.85	5	84	7.00	12.0		9.6	180

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/04	1250	WATER	0	26	13	94	.32	.020	.300	.030	.010K
84/11/13	1230	WATER	0	26	10	91					
84/12/03	1230	WATER	0	23	36	110					
85/01/22	1350	WATER	0	27	17	130	.48	.060	.200	.020	.010K
85/02/27	1215	WATER	0	21	45	110					
85/03/26	1225	WATER	0	23	13	96					
85/04/22	0905	WATER	0	28	10	96	.34	.030	.200	.050	.010
85/05/20	0855	WATER	0	28	29	110					
85/06/12	1140	WATER	0	26	89	190					
85/07/11	0905	WATER	0	29	37	140	.29	.020	.300	.030	.010
85/08/12	0845	WATER	0.1	30	9	100					
85/09/18	0845	WATER	0.1	31	6	88					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/04	1250	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/22	1350	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/22	0905	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/11	0905	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50

K Less than noted value.

02094500 REEDY FORK NEAR GIBSONVILLE, NC

LOCATION.--Lat 36°10'31", long 79°37'01", Guilford County, Hydrologic Unit 03030002, on right bank 0.2 mi downstream from Huffines Mill on Secondary Road 2719, 1.2 mi upstream from Buffalo Creek, and 6 mi northwest of Gibsonville.

DRAINAGE AREA.--131 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1928 to current year.

REVISED RECORDS.--WSP 1303: 1929-40 (monthly and yearly runoff). WSP 1383: 1929-30, 1933(M), 1934, 1937(M), 1939-42(M), 1948. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and rock-masonry control. Datum of gage is 626.88 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1923 by Lake Brandt 14 mi upstream (station 02094117), since 1957 by Lake Higgins on Brush Creek, a tributary to Lake Brandt, (station 02093981), since 1943 by Richland Lake 12 mi above station, and since 1968 by Lake Townsend 9 mi above station (station 02094305). City of Greensboro diverted from Lake Brandt an average of 24.9 ft^3/s and an average of 18.6 ft^3/s from Lake Townsend for municipal water supply.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--57 years, 101 ft^3/s, 10.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft^3/s Sept. 25, 1947, gage height, 20.77 ft; minimum daily, 0.4 ft^3/s Oct. 14, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 17.90 ft, from information by local resident, discharge, 8,640 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,020 ft^3/s July 13, gage height 7.63 ft; minimum discharge, 5.1 ft^3/s June 29, gage height, 0.66 ft; minimum daily, 5.2 ft^3/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	16	16	20	244	288	16	7.1	6.7	9.8	124	63
2	17	14	13	25	428	326	15	6.5	6.3	8.9	85	44
3	12	13	28	336	339	302	13	10	6.8	7.7	49	34
4	11	11	23	716	360	58	13	10	6.4	7.1	32	25
5	10	13	63	767	203	26	13	8.6	6.0	10	23	21
6	12	12	253	375	177	22	13	8.1	6.3	8.9	16	21
7	11	10	255	378	165	19	13	7.7	6.8	7.5	16	22
8	11	9.9	139	199	157	19	13	7.9	11	7.2	16	20
9	11	9.5	94	115	142	20	12	6.9	10	6.6	14	19
10	11	9.4	74	75	122	19	12	6.6	8.0	6.3	16	20
11	10	12	63	61	107	18	12	6.8	7.7	6.4	12	18
12	9.9	13	51	58	246	18	12	7.0	28	7.0	10	15
13	10	10	46	54	433	17	12	6.7	16	266	9.7	12
14	9.7	9.7	42	49	409	17	12	6.0	13	134	11	9.1
15	9.9	9.2	39	56	269	17	13	5.8	13	22	10	10
16	9.8	9.7	38	69	150	16	13	23	10	13	10	10
17	10	9.8	39	311	98	17	13	21	12	8.6	17	15
18	11	9.4	36	317	70	16	11	12	11	6.9	235	19
19	12	14	36	312	55	15	11	8.1	9.5	7.3	84	12
20	11	18	37	309	45	15	10	6.5	7.4	12	102	11
21	11	13	36	299	91	15	9.5	12	6.7	12	183	11
22	11	11	44	293	393	24	8.7	33	6.1	7.2	144	9.5
23	15	10	43	280	385	42	8.3	28	6.0	6.9	94	9.0
24	15	10	38	61	378	28	8.2	18	5.9	7.5	74	8.6
25	14	10	39	25	339	24	9.5	15	5.8	74	95	7.8
26	13	10	34	20	121	20	8.6	11	5.8	71	149	9.0
27	14	10	32	17	52	20	7.8	9.0	5.5	35	388	12
28	13	36	32	19	35	20	8.0	7.6	5.2	186	419	8.6
29	17	43	81	20	---	18	8.4	6.7	5.4	75	390	6.9
30	28	20	311	20	---	17	7.6	6.7	17	69	190	7.5
31	21	---	40	36	---	16	---	6.8	---	67	107	---
TOTAL	417.3	405.6	2115	5692	6013	1509	336.6	336.1	271.3	1173.8	3124.7	510.0
MEAN	13.5	13.5	68.2	184	215	48.7	11.2	10.8	9.04	37.9	101	17.0
MAX	36	43	311	767	433	326	16	33	28	266	419	63
MIN	9.7	9.2	13	17	35	15	7.6	5.8	5.2	6.3	9.7	6.9

CAL YR 1984 TOTAL 62635.1 MEAN 171 MAX 3790 MIN 6.1
WTR YR 1985 TOTAL 21904.4 MEAN 60.0 MAX 767 MIN 5.2

02094500 REEDY FORK NEAR GIBSONVILLE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/01	1315	WATER	0	1.23	38	74	7.20	14.0	17.0	9.4	1800
84/11/01	1245	WATER	0	.94	15	90	6.70	19.0		7.9	20
84/12/06	1235	WATER	0	2.18	198	69	7.10	6.0		11.8	240
85/01/07	1305	WATER	0	2.90	376	54	7.40	8.0	5.4	11.5	60
85/02/04	1005	WATER	0	2.87	368	55	6.90	33.0		12.2	10K
85/03/05	0940	WATER	0	1.10	26	64	7.30	12.0		10.9	670
85/04/04	1000	WATER	0	.91	13	84	7.40	15.0	5.7	9.8	10
85/05/21	0935	WATER	0	.77	6	90	7.20	20.0		8.0	10
85/06/10	1040	WATER	0	.76	8	98	7.70	23.0		7.6	50
85/07/01	0940	WATER	0			88	7.60	20.0	220.0	6.9	2400
85/08/08	0930	WATER	0.1	.98	18	73	7.90	23.0		7.6	20
85/09/03	1020	WATER	0.1	1.19	34	87	7.40	24.0		7.9	80

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/01	1315	WATER	0	30	15	71	.19	.010K	.200	.050	.010K
84/11/01	1245	WATER	0	35	9	89	.03	.020	.500	.050	.010
84/12/06	1235	WATER	0	23	31	120	.22	.010	.400	.090	.010K
85/01/07	1305	WATER	0	22	14	67	.09	.060	.040	.040	.010K
85/02/04	1005	WATER	0	22	13	85	.10	.030	.300	.040	.010K
85/03/05	0940	WATER	0	25	10	77	.11	.010K	.200	.020	.010K
85/04/04	1000	WATER	0	35	6	88	.09	.010K	.200	.020	.010K
85/05/21	0935	WATER	0	35	14	110	.23	.030	.300	.040	.010K
85/06/10	1040	WATER	0	41	9	94	.28	.030	.200	.030	.010K
85/07/01	0940	WATER	0	29	120	240	.26	.040	.400	.150	.010K
85/08/08	0930	WATER	0.1	31	10	100	.24	.040	.300	.050	.010
85/09/03	1020	WATER	0.1	30	16	130	.12	.030	.400	.060	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/01	1315	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/07	1305	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/04	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/01	0940	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02095500 NORTH BUFFALO CREEK NEAR GREENSBORO, NC

LOCATION.--Lat 36°07'13", long 79°42'30", Guilford County, Hydrologic Unit 03030002, on left bank 5 ft downstream from bridge on Secondary Road 2832, 4.2 mi upstream from mouth, and 5.8 mi northeast of post office in Greensboro.

DRAINAGE AREA.--37.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to current year.

REVISED RECORDS.--WSP 1303: 1929, 1931-42, monthly and yearly runoff. WSP 1383: 1928(M), 1929, 1933-34(M), 1936(M), 1941(M), 1943(M), 1945(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 678.02 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation at low flow caused by mills upstream from station. Diversion into basin from Greensboro and Proximity Mills enter upstream from station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--57 years, 56.2 ft^3/s, 20.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,140 ft^3/s Sept. 22, 1979, gage height, 20.12 ft from floodmarks, from rating curve extended above 2,900 ft^3/s on basis of contracted-opening measurements at gage heights 14.15 ft, 15.96 ft, and 16.63 ft; minimum, 1.6 ft^3/s Aug. 28, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	0500	1,220	8.40	Aug. 18	0430	*1,700	*10.25
July 25	1700	1,260	8.60				

Minimum discharge, 6.8 ft^3/s Sept. 9, gage height, 1.77 ft; minimum daily, 23 ft^3/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	29	38	32	679	54	33	31	30	56	67	29
2	36	29	36	128	608	50	31	30	26	33	36	29
3	33	27	148	691	121	46	34	151	51	26	32	29
4	32	28	42	409	79	45	31	36	38	57	27	31
5	31	38	285	130	148	43	34	30	106	81	27	30
6	31	28	157	69	167	40	40	27	74	27	28	30
7	30	28	53	57	97	39	30	29	50	45	32	28
8	31	27	46	49	73	41	29	28	55	26	35	27
9	30	28	42	46	65	43	31	27	28	25	58	26
10	30	26	42	44	57	40	32	30	27	26	42	28
11	29	68	43	43	56	38	31	30	54	42	26	28
12	30	30	40	42	362	42	31	27	160	50	26	28
13	28	30	37	43	94	42	33	25	43	114	28	26
14	27	32	37	41	73	38	32	27	30	201	26	26
15	27	32	42	40	65	42	31	66	27	79	26	25
16	28	38	40	37	60	38	64	243	42	58	48	24
17	28	35	35	49	59	37	44	103	43	29	100	26
18	28	35	36	38	53	36	30	37	36	27	570	26
19	28	108	36	33	52	33	32	29	33	26	63	27
20	27	44	36	33	50	37	33	26	33	25	120	27
21	27	38	35	31	45	35	29	28	31	24	250	24
22	35	35	59	42	50	141	28	128	31	41	51	24
23	35	34	36	43	47	105	29	248	30	58	38	24
24	32	31	32	44	42	57	34	50	30	26	100	26
25	29	30	31	40	48	44	54	37	25	585	105	25
26	28	31	31	30	302	40	32	30	25	86	220	24
27	28	32	33	30	79	38	31	28	25	57	200	24
28	27	307	33	34	60	36	32	30	25	365	206	24
29	77	79	33	49	---	37	44	30	106	119	52	23
30	95	43	33	40	---	34	29	27	78	124	42	23
31	32	---	31	213	---	36	---	26	---	76	36	---
TOTAL	1179	1400	1658	2650	3691	1427	1028	1694	1392	2614	2717	791
MEAN	38.0	46.7	53.5	85.5	132	46.0	34.3	54.6	46.4	84.3	87.6	26.4
MAX	170	307	285	691	679	141	64	248	160	585	570	31
MIN	27	26	31	30	42	33	28	25	25	24	26	23

CAL YR 1984	TOTAL	35277	MEAN	96.4	MAX	2570	MIN	26
WTR YR 1985	TOTAL	22241	MEAN	60.9	MAX	691	MIN	23

02095500 NORTH BUFFALO CREEK NEAR GREENSBORO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/01	1430	WATER	0	2.57	65	218	7.00	17.0	90.0	7.6	3000
84/11/01	1355	WATER	0	2.19	29	473	6.90	20.0		6.2	800
84/12/06	1350	WATER	0	2.84	102	176	6.90	8.0		9.8	1200
85/01/07	1410	WATER	0	2.49	56	273	7.10	10.0	7.6	9.6	10K
85/02/04	0920	WATER	0	2.69	80	235	6.80	5.0		10.1	10K
85/03/05	0850	WATER	0	2.37	44	408	7.10	15.0		7.6	1800
85/04/04	0850	WATER	0	2.20	29	432	7.00	15.0	3.4	6.0	80
85/05/21	0845	WATER	0	2.12	24	420	6.90	21.0		5.6	180
85/06/10	0900	WATER	0	2.06	20	400	6.80	23.0		5.8	10000
85/07/01	0805	WATER	0	3.02	131						
85/07/01	0850	WATER	0			371	7.10	22.0		6.4	1700
85/08/08	0850	WATER	0.1	2.17	27	345	7.20	25.0		6.7	5700
85/09/03	1000	WATER	0.1	2.08	21	401	7.10	24.0		6.2	230

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/01	1430	WATER	0	34	38	200	3.90	.160	.700	1.200	1.100
84/11/01	1355	WATER	0	67	3	340	7.10	.300	1.100	3.000	2.800
84/12/06	1350	WATER	0	41	30	170	1.40	.930	1.100	.790	.620
85/01/07	1410	WATER	0	54	9	230	4.60	.300	.800	1.500	1.300
85/02/04	0920	WATER	0	51	19	220	2.20	.730	1.200	1.000	.800
85/03/05	0850	WATER	0	91	19	300	.72	5.900	6.700	1.600	1.400
85/04/04	0850	WATER	0	71	11	330	5.00	1.000	2.000	3.000	2.500
85/05/21	0845	WATER	0	44	10	330	10.00	.490	1.700	3.400	2.800
85/06/10	0900	WATER	0	25	8	330	15.00	2.200	3.100	3.400	2.700
85/07/01	0850	WATER	0	36	87	380	7.40	.310	1.800	1.500	1.300
85/08/08	0850	WATER	0.1	50	8	280	7.20	1.400	2.500	2.800	2.300
85/09/03	1000	WATER	0.1	50	4	320	10.00	.160	1.200	2.500	2.000

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/01	1430	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/01/07	1410	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/04/04	0850	WATER	0	10K	20K	50K	20	100K	.2K	100K	90
85/07/01	0850	WATER	0	10K	20K	50K	20K	100K	.2K	100K	120

K Less than noted value.

02096500 HAW RIVER AT HAW RIVER, NC

LOCATION.--Lat 36°05'13", long 79°22'02", Alamance County, Hydrologic Unit 03030002, on left bank at town of Haw River, 650 ft downstream from Southern Railway bridge, 800 ft downstream from bridge on U.S. Highway 70 and State Highway 49, and 3 mi downstream from Stony Creek.

DRAINAGE AREA.--606 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 757: 1929(M). WSP 782: 1934. WSP 1383: 1930, 1932(M), 1933(m), 1936, 1943, 1944(M), 1947(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 471.69 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation and occasional regulation at low flows. City of Burlington diverted from two reservoirs on Stony Creek (stations 02096003, 02096432) an average of 10.8 ft^3/s for municipal water supply, about half of which was returned upstream from station as sewage effluent, the remainder was returned downstream from station. U. S. Army Corps of Engineers gage-height telephone telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--57 years, 581 ft^3/s, 13.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,000 ft^3/s Sept. 18, 1945, gage height, 31.10 ft, from floodmark; minimum 3 ft^3/s Sept. 5, 1930, gage height, 0.92 ft; minimum daily, 5 ft^3/s Sept. 6, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	0800	*8,120	*16.27	Aug. 18	1800	6,360	14.08

Minimum discharge, 29 ft^3/s July 20, gage height, 1.35 ft; minimum daily, 79 ft^3/s June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	203	338	223	4620	653	264	137	128	235	728	667
2	467	192	281	241	7150	758	232	137	124	185	471	401
3	349	186	617	3110	3030	693	213	233	124	140	315	301
4	301	173	476	5290	1930	512	210	342	131	103	227	243
5	222	170	547	3640	1430	372	205	176	143	127	176	199
6	198	197	2210	1830	1670	350	204	158	286	147	147	179
7	186	185	987	1400	1430	309	223	140	220	109	178	158
8	182	177	630	969	938	301	206	139	199	125	175	153
9	173	171	461	632	731	300	192	130	221	96	175	141
10	176	172	386	477	619	301	182	123	154	100	213	139
11	170	189	344	422	538	287	175	119	126	136	181	143
12	170	253	321	388	2140	282	175	133	191	119	142	131
13	164	200	301	356	1760	285	182	145	297	126	123	126
14	160	188	285	331	1260	263	186	137	169	1960	126	117
15	150	180	274	327	1000	251	197	132	139	348	117	107
16	158	174	263	307	708	255	195	420	144	252	112	106
17	156	172	267	455	562	251	244	546	149	223	155	100
18	166	175	268	619	478	256	231	376	164	142	4770	113
19	164	196	263	598	430	219	194	251	138	135	2350	121
20	164	318	257	579	405	208	191	204	120	91	706	108
21	163	237	268	514	370	222	177	188	111	103	1610	111
22	165	224	271	489	598	302	158	393	107	144	1670	122
23	177	209	330	506	700	694	157	995	87	213	777	119
24	204	196	274	400	682	534	150	724	96	175	551	109
25	184	188	255	277	673	450	151	299	95	962	847	108
26	187	191	247	256	1620	364	197	247	96	1660	962	107
27	181	192	239	237	1170	316	151	185	82	745	1340	102
28	179	255	241	258	670	295	149	152	83	1880	2710	99
29	204	962	242	280	---	281	156	145	79	1210	1130	86
30	338	432	440	299	---	285	158	143	333	662	774	100
31	272	---	344	634	---	263	---	133	---	569	2300	---
TOTAL	6791	6957	12927	26344	39312	11112	5705	7782	4536	13222	26258	4816
MEAN	219	232	417	850	1404	358	190	251	151	427	847	161
MAX	661	962	2210	5290	7150	758	264	995	333	1960	4770	667
MIN	150	170	239	223	370	208	149	119	79	91	112	86
CFSM	.36	.38	.69	1.40	2.32	.59	.31	.41	.25	.70	1.40	.27
IN.	.42	.43	.79	1.62	2.41	.68	.35	.48	.28	.81	1.61	.30

CAL YR 1984	TOTAL	342152	MEAN	935	MAX	14100	MIN	150	CFSM 1.54	IN.	21.00
WTR YR 1985	TOTAL	165762	MEAN	454	MAX	7150	MIN	79	CFSM .75	IN.	10.18

02096500 HAW RIVER AT HAW RIVER, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/01	1110	WATER	0	2.90	308	212	7.40	16.0	55.0	9.2	1500
84/11/01	1100	WATER	0	2.23	210	231	7.20	20.0		8.4	180
84/12/06	1045	WATER	0	8.34	2640	122	7.20	7.0		11.6	1400
85/01/07	1055	WATER	0	5.78	1430	77	7.20	6.0	27.0	12.0	1200
85/02/04	1130	WATER	0	7.04	1990	63	6.90	4.0		12.0	570
85/03/05	1155	WATER	0	2.86	376	112	7.70	14.0		10.8	170
85/04/04	1145	WATER	0	2.30	285	228	8.70	18.0	4.0	12.3	20
85/05/21	1110	WATER	0.1	2.06	151	223	7.70	22.0		8.2	160
85/06/10	1120	WATER	0	2.18	176	330	7.70	25.0		7.4	690
85/07/01	1200	WATER	0	2.19	178	359	7.40	21.0	65.0	7.4	1500
85/08/08	1115	WATER	0.1	2.10	200	253	8.70	24.0		7.3	4600
85/09/03	1125	WATER	0.1	2.57	290	149	7.80	25.0		8.0	300

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/01	1110	WATER	0	41	24	180	2.30	.040	.500	1.200	1.000
84/11/01	1100	WATER	0	51	10	190	1.60	.060	.800	.790	.700
84/12/06	1045	WATER	0	33	190	300	.85	.200	.900	.780	.310
85/01/07	1055	WATER	0	22	26	110	.44	.060	.400	.130	.030
85/02/04	1130	WATER	0	20	39	130	.47	.120	.600	.140	.040
85/03/05	1155	WATER	0	31	9	120	.58	.200	.600	.220	.120
85/04/04	1145	WATER	0	62	6	180	.85	.010	.400	.510	.430
85/05/21	1110	WATER	0.1	48	11	210	.82	.060	.600	.580	.450
85/06/10	1120	WATER	0	52	20	270	2.70	.060	.800	.910	.790
85/07/01	1200	WATER	0	45	66	340	5.10	.330	1.700	1.600	1.400
85/08/08	1115	WATER	0.1	51	42	250	2.10	.050	2.500	.980	.840
85/09/03	1125	WATER	0.1	38	19	170	1.10	.040	.600	.290	.210

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/01	1110	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/07	1055	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/04	1145	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/21	1110	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20
85/06/10	1120	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/07/01	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/08/08	1115	WATER	0.1	10K	20K	50K	20K	100K	.4	100K	20
85/09/03	1125	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02096960 HAW RIVER NEAR BYNUM, NC

LOCATION.--Lat 35°45'48", long 79°08'02", Chatham County, Hydrologic Unit 03030002, on right bank 500 ft upstream from Pokeberry Creek, 0.9 mi south-southeast of Bynum, and 1.1 mi downstream from U.S. Highway 15 and 501.

DRAINAGE AREA.--1,275 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 283.31 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Considerable regulation for short periods at low flow caused by powerplant above station. Gage height telemeter and satellite data transmitter at the station.

AVERAGE DISCHARGE.--12 years, 1,379 ft³/s, 14.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,800 ft³/s Mar. 14, 1975, gage height, 17.67 ft; minimum, 0.18 ft³/s Sept. 10, 27, 1983, gage height, 1.86 ft; minimum daily, 0.18 ft³/s Sept. 10, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 2	1200	20,800	13.02	Aug. 18	1415	*24,200	*13.91

Minimum discharge, 1.1 ft³/s Oct. 11, gage height, 1.93 ft; minimum daily, 81 ft³/s Oct. 9, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	739	469	521	583	15300	1460	591	303	274	464	1400	2240
2	1090	282	438	349	19000	1480	569	262	249	329	902	886
3	618	162	887	3950	8940	1360	525	1310	230	271	635	637
4	493	358	1330	12000	3970	1210	488	1120	236	221	442	512
5	413	145	854	8510	2930	951	478	620	224	180	323	436
6	291	235	3520	3670	3800	873	472	422	288	160	278	368
7	147	231	2340	2420	4080	799	455	333	459	268	234	334
8	430	223	1230	1870	2500	633	444	304	393	178	366	266
9	81	230	953	1310	1790	737	431	284	346	175	358	277
10	314	329	651	1020	1440	723	383	276	363	173	340	251
11	81	183	614	810	1260	608	408	299	252	152	380	222
12	287	183	511	767	4320	626	392	400	253	242	268	244
13	221	487	526	723	4780	676	400	336	343	184	223	254
14	132	331	472	609	2680	583	391	296	434	1680	202	205
15	166	162	444	626	2100	605	405	281	280	1170	184	169
16	290	272	472	566	1620	505	600	717	217	436	187	184
17	157	155	327	601	1280	547	823	1100	307	343	304	155
18	285	281	465	861	1100	553	556	888	285	301	14300	176
19	99	229	431	957	1010	517	483	564	365	218	8230	176
20	229	257	366	961	924	496	425	404	254	162	2060	215
21	135	326	436	755	868	506	383	399	213	174	2310	154
22	288	398	387	787	811	577	341	512	182	145	3670	173
23	252	352	488	772	1120	1240	334	4020	169	273	2100	183
24	152	195	431	851	1120	1500	303	2410	159	488	1110	190
25	352	173	460	691	1110	1470	279	920	160	1200	3360	178
26	191	344	376	443	3580	1130	339	642	127	4080	2970	166
27	192	176	420	441	4100	814	341	495	145	1490	2110	178
28	275	358	362	422	2040	754	312	373	139	3670	3190	171
29	224	766	342	479	---	694	250	358	158	2790	2080	151
30	236	1060	312	621	---	668	295	297	167	1740	1290	145
31	483	---	623	759	---	619	---	298	---	1040	2880	---
TOTAL	9343	9352	21989	50184	99573	25914	12896	21243	7671	24397	58686	9896
MEAN	301	312	709	1619	3556	836	430	685	256	787	1893	330
MAX	1090	1060	3520	12000	19000	1500	823	4020	459	4080	14300	2240
MIN	81	145	312	349	811	496	250	262	127	145	184	145
CFSM	.24	.24	.56	1.27	2.79	.66	.34	.54	.20	.62	1.48	.26
IN.	.27	.27	.64	1.46	2.91	.76	.38	.62	.22	.71	1.71	.29

CAL YR 1984 TOTAL 687621 MEAN 1879 MAX 22500 MIN 73 CFSM 1.47 IN. 20.06
WTR YR 1985 TOTAL 351144 MEAN 962 MAX 19000 MIN 81 CFSM .75 IN. 10.25

02096960 HAW RIVER NEAR BYNUM, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1981 to September 1984.
WATER TEMPERATURE: October 1981 to September 1984

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1984.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the B. Everett Jordan Lake.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1982-84): Maximum, 514 microsiemens Sept. 19, 1983; minimum, 46 microsiemens Mar. 21, 1983.
WATER TEMPERATURE (water years 1982-84): Maximum, 35.0°C July 21, 1983; minimum, 0.0°C on several days during winter months in water years 1982 and 1984.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV											
14...	1200	238	340	7.3	9.0	29	764	12.0	104	--	--
DEC											
17...	1200	326	190	6.1	9.0	20	759	11.1	96	--	--
JAN											
30...	1200	618	185	6.9	1.0	20	755	14.0	99	--	--
FEB											
26...	0930	2850	105	6.8	11.5	70	758	12.1	112	21000	K10000
MAR											
18...	1400	548	188	7.6	12.0	30	751	12.5	118	--	--
APR											
22...	1230	341	260	6.9	22.0	20	755	8.3	96	--	--
MAY											
23...	1415	4650	95	6.4	19.5	1500	756	7.8	86	--	--
JUN											
26...	1140	123	350	7.7	27.5	30	758	--	--	--	--
JUL											
29...	1230	2660	100	6.4	23.0	40	756	8.2	96	--	--
AUG											
19...	0955	8340	68	6.2	23.5	200	752	8.6	103	--	--
SEP											
25...	1700	176	420	7.7	21.0	35	763	10.3	116	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

02096960 HAW RIVER NEAR BYNUM, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV 14...	46	0	11	4.4	49	67	3	6.0	43	26	.40
DEC 17...	37	0	9.0	3.6	23	54	2	3.7	24	14	.20
JAN 30...	38	1	9.1	3.7	20	51	1	3.3	20	16	.20
FEB 26...	27	2	6.4	2.6	8.6	38	.7	2.8	11	7.9	.10
MAR 18...	36	0	8.5	3.5	21	52	2	5.5	23	14	.20
APR 22...	38	0	8.8	4.0	34	63	2	3.7	34	19	.80
MAY 23...	23	4	5.5	2.3	7.3	37	.7	2.9	11	5.8	.10
JUN 26...	37	0	8.1	4.0	46	70	3	5.1	62	26	.40
JUL 29...	28	5	6.9	2.7	8.6	37	.7	2.9	15	6.6	.10
AUG 19...	19	6	4.8	1.8	3.6	25	.4	3.3	7.6	3.6	.10
SEP 25...	47	0	11	4.7	61	71	4	6.2	59	36	.40

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
NOV 14...	15	200	200	.27	129	2.3	.040	2.3	--	.290	--
DEC 17...	15	132	120	.18	116	1.2	.040	1.2	1.1	.490	.330
JAN 30...	17	131	110	.18	219	1.2	.010	1.2	--	.260	--
FEB 26...	12	75	67	.10	577	.57	.030	.60	--	.190	.130
MAR 18...	12	136	110	.19	201	.79	.010	.80	--	.040	--
APR 22...	10	144	140	.20	133	1.2	.040	1.2	--	.100	--
MAY 23...	8.0	67	55	.09	841	1.1	.120	1.2	.93	.550	.310
JUN 26...	9.7	213	190	.29	71	1.8	.060	1.9	--	.090	--
JUL 29...	11	80	68	.11	575	.45	.050	.50	--	.090	--
AUG 19...	7.6	40	41	.05	901	.36	.040	.40	.36	.560	.530
SEP 25...	12	241	240	.33	115	--	<.010	2.2	--	.130	--

CAPE FEAR RIVER BASIN

02096960 HAW RIVER NEAR BYNUM, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
NOV 14...	--	.51	--	.80	--	--	3.1	14	--	.980
DEC 17...	.43	.71	.97	1.2	--	1.3	2.4	11	2.4	.640
JAN 30...	--	.14	--	.40	--	--	1.6	7.1	--	.440
FEB 26...	.17	1.1	--	1.3	--	--	1.9	8.4	--	.330
MAR 18...	--	.76	--	.80	--	--	1.6	7.1	--	.140
APR 22...	--	.60	--	.70	--	--	1.9	8.4	--	.620
MAY 23...	.40	2.4	1.9	2.9	.70	2.2	4.1	18	3.1	.800
JUN 26...	--	1.4	--	1.5	--	--	3.4	15	--	.640
JUL 29...	--	.71	--	.80	--	--	1.3	5.8	--	.290
AUG 19...	.68	2.2	--	2.8	--	--	3.2	14	--	.200
SEP 25...	--	.87	--	1.0	--	--	3.2	14	--	1.10

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
NOV 14...	--	1.00	--	--	2	<1	20	5	640	3
DEC 17...	.580	.590	.560	1.7	1	<1	<10	7	860	1
JAN 30...	--	.420	--	--	<1	<1	10	--	--	2
FEB 26...	.230	.200	.190	.58	<1	<1	10	8	3400	6
MAR 18...	--	.120	--	--	<1	<1	20	6	740	<1
APR 22...	--	.540	--	--	1	<1	<10	5	490	2
MAY 23...	.080	.230	.090	.28	<1	1	40	49	--	28
JUN 26...	--	.610	--	--	2	<1	<10	8	430	2
JUL 29...	--	.220	--	--	1	<1	10	9	4100	9
AUG 19...	.130	.190	.100	.31	<1	<1	20	20	850	20
SEP 25...	--	.960	--	--	1	3	10	67	620	39

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 14...	20	<.1	<1	20	8.4	--	4	2.6
DEC 17...	60	.3	<1	30	6.0	--	9	7.9
JAN 30...	--	.1	<1	20	4.8	--	4	6.7
FEB 26...	190	.2	<1	10	7.9	.04	109	839
MAR 18...	50	<.1	<1	10	11	--	--	--
APR 22...	60	.2	<1	20	5.8	--	6	5.5
MAY 23...	700	.3	<1	90	13	.05	826	10400
JUN 26...	50	.1	<1	40	6.6	--	7	2.3
JUL 29...	250	.1	<1	50	9.7	--	130	934
AUG 19...	500	<.1	<1	90	16	.06	317	7140
SEP 25...	20	.1	<1	--	6.9	--	51	24

02096960 HAW RIVER NEAR BYNUM, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/30	1100	WATER	0	3.31	260	275	7.40	21.0		7.5	10K
84/11/26	1145	WATER	0	3.55	359	185	7.50	7.0	5.6	13.0	130
84/12/14	1100	WATER	0	3.77	471	100	7.70	8.0		11.2	20
85/01/11	1015	WATER	0	4.15	690	65		5.0		11.5	
85/02/20	1102	WATER	0	4.34	816	79	7.10	6.0	24.0	11.8	30
85/03/26	1045	WATER	0	4.74	1140	94	7.10	12.0		10.6	350
85/04/23	1040	WATER	0	3.50	335	225	7.40	22.0		7.0	50
85/05/17	1100	WATER	0	4.94	1330	168	7.20	21.0	130.0	7.2	5300
85/06/13	1030	WATER	0	3.34	271	275	7.20	24.0		8.0	40
85/07/30	1030	WATER	0.1	5.40	1860	82	7.00	26.0		7.8	2000
85/08/20	1040	WATER	0.1	5.52	2010	72	7.00	24.0	60.0	8.1	1900
85/09/23	1050	WATER	0.1	3.04	178	280	7.50	21.0		9.2	40

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	1100	WATER	0	72	4	220	1.90	.050	.700	1.200	1.100
84/11/26	1145	WATER	0	71	2	210	2.40	.060	.500	1.000	.960
84/12/14	1100	WATER	0	39	4	130	.94	.240	.600	.330	.260
85/01/11	1015	WATER	0		8	130	.75	.160	.400	.210	.120
85/02/20	1102	WATER	0		9	110	.79	.130	.400	.180	.120
85/03/26	1045	WATER	0	43	13	220	.80	.100	.400	.200	.110
85/04/23	1040	WATER	0	160	5	190	1.40	.110	.600	.500	.430
85/05/17	1100	WATER	0	31	52	270	1.80	.190	.800	.530	.320
85/06/13	1030	WATER	0	50	7	220	2.40	.110	.600	.780	.710
85/07/30	1030	WATER	0.1	22	83	220	.70	.090	.700	.300	.130
85/08/20	1040	WATER	0.1	23	36	150	.44	.220	.800	.200	.070
85/09/23	1050	WATER	0.1	64	4	220	1.30	.050	.600	.480	.400

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/26	1145	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/20	1102	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/17	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/13	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/30	1030	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	40
85/08/20	1040	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/23	1050	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

02097314 NEW HOPE CREEK NEAR BLANDS, NC

LOCATION.--Lat 35°53'05", long 78°57'58", Durham County, Hydrologic Unit 03030002, on right bank 15 ft downstream from bridge on Secondary Road 1107, 0.5 mi southwest of Blands, and 2 mi downstream from Third Fork Creek.

DRAINAGE AREA.--75.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Slight diurnal fluctuation at low flow. The city of Durham diverted an average of 30.4 ft³/s from Neuse River basin for municipal water supply and returned 13.4 ft³/s as sewage effluent into the Cape Fear River basin, of which 10.6 ft³/s entered upstream from station. About 12.4 ft³/s was returned to the Neuse River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s Mar. 6, 1984, gage height 10.98 ft; minimum, 4.2 ft³/s Apr. 28, 29, May 1, 2, July 10, 1985; minimum gage height, 3.38 ft July 10, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 5	0300	970	9.17	Feb. 1	2330	*2,300	*10.42

Minimum discharge, 4.2 ft³/s Apr. 28, 29, May 1, 2, July 10; minimum gage height, 3.38 ft, July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	17	21	18	889	103	24	6.5	15	46	23	44
2	65	14	17	22	1580	72	22	6.9	14	52	36	27
3	22	12	122	225	1140	61	19	106	13	24	26	23
4	15	12	105	751	1110	53	19	180	13	16	19	21
5	13	15	54	850	1130	48	18	50	12	13	17	19
6	12	16	253	437	1090	44	16	31	13	13	17	18
7	12	13	142	129	886	36	15	25	13	16	16	17
8	12	13	62	92	448	33	13	22	13	19	16	16
9	12	12	39	65	190	32	13	21	13	14	16	16
10	12	15	32	56	106	30	13	20	11	12	16	16
11	12	23	29	53	70	28	14	20	11	18	15	16
12	13	28	26	48	243	29	14	21	11	15	15	15
13	12	15	25	42	513	28	13	22	15	14	16	15
14	11	15	24	40	243	26	14	23	14	43	16	15
15	10	15	23	39	109	25	17	20	12	25	16	14
16	11	12	22	34	84	23	16	58	11	20	15	14
17	12	11	22	40	70	21	21	74	12	68	18	15
18	13	12	23	61	58	21	17	41	12	25	92	15
19	14	11	23	47	54	21	14	27	36	17	271	14
20	13	17	21	40	51	21	11	21	18	15	295	14
21	13	19	22	31	49	22	9.7	18	13	14	227	13
22	25	15	25	28	44	33	9.0	27	11	30	297	13
23	23	12	24	32	43	75	9.4	222	9.6	43	93	15
24	17	12	23	33	41	63	8.9	384	9.4	28	49	15
25	14	11	20	37	39	106	8.5	85	10	57	88	14
26	13	12	19	35	269	71	7.8	39	9.9	165	254	14
27	15	13	19	30	493	49	7.4	26	10	58	348	14
28	13	16	19	36	206	39	7.0	21	10	93	100	13
29	13	46	19	52	---	33	6.9	20	9.7	55	48	12
30	14	28	18	54	---	30	6.8	18	54	39	34	12
31	21	---	18	89	---	27	---	16	---	29	28	---
TOTAL	575	482	1311	3546	11248	1303	404.4	1671.4	428.6	1096	2537	499
MEAN	18.5	16.1	42.3	114	402	42.0	13.5	53.9	14.3	35.4	81.8	16.6
MAX	98	46	253	850	1580	106	24	384	54	165	348	44
MIN	10	11	17	18	39	21	6.8	6.5	9.4	12	15	12
CFSM	.24	.21	.56	1.50	5.30	.55	.18	.71	.19	.47	1.08	.22
IN.	.28	.24	.64	1.74	5.51	.64	.20	.82	.21	.54	1.24	.24

CAL YR 1984 TOTAL 47849.7 MEAN 131 MAX 2240 MIN 8.7 CFSM 1.73 IN. 23.45
WTR YR 1985 TOTAL 25101.4 MEAN 68.8 MAX 1580 MIN 6.5 CFSM .91 IN. 12.30

02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1982 to September 1985.
WATER TEMPERATURE: December 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from December 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the B. Everett Jordan Lake. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 535 microsiemens Sept. 30, 1984; minimum, 38 microsiemens Mar. 6, 7, 1984.
WATER TEMPERATURE: Maximum, 27.5°C Aug. 23, 1983; minimum, 0.0°C Jan. 21, 22, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 532 microsiemens Oct. 1; minimum, 65 microsiemens Feb. 2.
WATER TEMPERATURE: Maximum recorded, 26.0°C Aug 12-16; minimum 0.0°C Jan. 21, 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT												
16...	1115	11	470	7.2	18.0	20	759	1.0	11	--	88	49
NOV												
14...	0935	15	340	7.0	8.5	19	767	4.0	34	--	--	46
DEC												
17...	1000	20	200	6.0	12.0	10	762	7.6	71	160	K1100	50
JAN												
30...	0930	55	340	6.9	2.5	10	760	12.0	88	--	--	57
FEB												
26...	1545	311	103	6.4	12.5	200	761	8.3	78	K3000	5300	28
MAR												
18...	1120	19	236	6.6	10.5	120	758	8.4	76	--	--	43
APR												
22...	0955	7.0	300	6.6	18.0	15	759	4.2	45	K20	K24	47
MAY												
23...	1050	217	86	6.2	19.5	1000	762	5.6	61	--	--	23
JUN												
26...	1400	7.2	365	6.8	25.0	20	763	--	--	--	--	46
JUL												
29...	1005	48	130	6.4	23.0	300	758	7.1	83	--	--	34
AUG												
19...	1115	225	75	6.0	23.0	15	750	5.0	59	--	--	21
SEP												
25...	1130	14	360	6.9	22.0	25	770	5.5	62	--	--	42

K Results based on colony count outside the acceptable range (non-ideal colony count).

02097314 NEW HOPE CREEK NEAR BLANDS--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 16...	0	13	4.1	44	62	3	7.9	46	37	1.1	14	252
NOV 14...	0	12	3.9	35	58	2	6.9	25	26	.80	12	195
DEC 17...	17	13	4.3	32	55	2	5.7	29	26	.60	15	190
JAN 30...	26	15	4.8	37	56	2	4.2	24	45	.50	12	291
FEB 26...	9	7.2	2.4	7.8	36	.7	2.1	14	8.7	.20	6.6	72
MAR 18...	9	11	3.8	24	50	2	6.4	20	19	.40	9.7	150
APR 22...	11	12	4.1	34	58	2	5.2	23	25	.70	12	183
MAY 23...	7	5.9	1.9	5.6	32	.5	2.4	12	5.1	.20	5.4	63
JUN 26...	0	12	3.8	41	61	3	8.3	36	32	1.0	14	230
JUL 29...	11	9.2	2.7	11	39	.8	3.1	19	11	.40	10	118
AUG 19...	0	5.5	1.7	5.2	32	.5	2.8	12	4.7	.20	7.2	60
SEP 25...	0	11	3.5	47	66	3	8.8	32	36	.90	13	217

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT 16...	230	.34	7.5	.07	.030	.10	--	11.0	--	--	1.0
NOV 14...	180	.27	7.9	.26	.040	.30	--	8.30	--	--	2.7
DEC 17...	150	.26	10	7.2	.280	7.5	6.7	.470	.390	.50	.63
JAN 30...	160	.40	43	2.5	.050	2.5	--	1.20	--	--	1.7
FEB 26...	61	.10	60	.51	.090	.60	.59	.250	.170	.22	.65
MAR 18...	110	.20	7.7	--	<.010	1.0	--	.070	--	--	.63
APR 22...	140	.25	3.5	.42	.380	.80	--	8.90	--	--	1.1
MAY 23...	49	.09	37	.54	.160	.70	.46	.490	.320	.41	.51
JUN 26...	180	.31	4.5	6.7	.330	7.0	--	.590	--	--	1.1
JUL 29...	80	.16	15	1.9	.050	1.9	--	.130	--	--	1.4
AUG 19...	56	.08	36	.94	.060	1.0	.74	.190	.100	.13	1.2
SEP 25...	190	.30	8.2	3.6	.230	3.8	--	1.70	--	--	.80

CAPE FEAR RIVER BASIN

02097314 NEW HOPE CREEK NEAR BLANDS--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT											
16...	—	12	—	—	12	54	—	3.30	—	2.60	—
NOV											
14...	—	11	—	—	11	50	—	3.90	—	2.70	—
DEC											
17...	—	1.1	—	—	8.6	38	—	3.40	3.00	2.90	2.90
JAN											
30...	—	2.9	—	—	5.4	24	—	1.00	—	.830	—
FEB											
26...	—	.90	—	—	1.5	6.6	—	.300	.330	.260	.190
MAR											
18...	—	.70	—	—	1.7	7.5	—	.080	—	.040	—
APR											
22...	—	10	—	—	11	48	—	3.00	—	2.60	—
MAY											
23...	.28	1.0	.40	.60	1.7	7.5	1.1	.620	.090	.350	.120
JUN											
26...	—	1.7	—	—	8.7	39	—	4.20	—	3.90	—
JUL											
29...	—	1.5	—	—	3.4	15	—	.920	—	.830	—
AUG											
19...	1.3	1.4	.00	1.4	2.4	11	2.1	.370	.270	.290	.250
SEP											
25...	—	2.5	—	—	6.3	28	—	4.60	—	4.70	—

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT											
16...	—	1	—	1	—	<10	—	8	1800	—	1
NOV											
14...	—	1	—	<1	—	10	—	9	1300	—	3
DEC											
17...	8.9	1	—	<1	—	<10	—	8	690	—	1
JAN											
30...	—	<1	—	<1	—	10	—	—	—	—	6
FEB											
26...	.58	<1	—	27	—	10	—	11	5700	—	3
MAR											
18...	—	1	—	<1	—	20	—	10	1400	—	2
APR											
22...	—	1	—	<1	—	<10	—	6	2500	—	5
MAY											
23...	.37	—	<1	—	1	—	10	—	—	120	—
JUN											
26...	—	2	—	<1	—	<10	—	7	2500	—	5
JUL											
29...	—	1	—	<1	—	30	—	13	6100	—	10
AUG											
19...	.77	1	—	<1	—	10	—	17	8400	—	18
SEP											
25...	—	<1	—	4	—	30	—	65	380	—	43

02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT 16...	840	--	<.1	--	<1	30	--	11	--	--	--
NOV 14...	330	--	<.1	--	<1	30	--	15	--	14	.57
DEC 17...	160	--	.4	--	<1	40	--	7.2	--	11	.59
JAN 30...	--	--	.2	--	<1	40	--	7.1	--	10	1.5
FEB 26...	240	--	.2	--	--	70	--	11	.02	--	--
MAR 18...	230	--	.2	--	<1	20	--	11	--	35	1.8
APR 22...	500	--	.3	--	<1	60	--	7.3	--	84	1.6
MAY 23...	--	180	--	<.1	--	--	59	11	.05	540	316
JUN 26...	190	--	.1	--	<1	100	--	9.0	--	40	.78
JUL 29...	260	--	.4	--	<1	60	--	17	--	251	33
AUG 19...	260	--	.2	--	<1	70	--	12	.05	330	200
SEP 25...	150	--	<.1	--	<1	--	--	7.6	--	99	3.7

CAPE FEAR RIVER BASIN

02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	532	195	328	394	293	347	327	281	309	322	255	303
2	253	209	225	410	368	392	340	303	330	334	268	307
3	324	256	293	420	345	382	406	159	259	304	103	161
4	387	327	359	373	342	357	519	165	302	106	83	93
5	421	389	408	370	355	363	379	204	243	83	73	77
6	440	423	432	368	328	347	---	---	---	113	75	89
7	445	440	442	397	367	386	---	---	---	136	108	119
8	456	445	450	394	378	387	---	---	---	165	120	142
9	463	456	458	398	390	393	---	---	---	199	138	173
10	471	461	466	415	401	407	---	---	---	214	162	196
11	480	468	474	397	339	363	---	---	---	218	160	198
12	482	476	479	334	251	269	---	---	---	250	186	222
13	491	482	486	344	267	297	---	---	---	256	196	234
14	---	---	---	353	333	340	---	---	---	257	190	232
15	---	---	---	391	359	382	---	---	---	253	203	239
16	481	467	473	390	333	360	---	---	---	253	164	229
17	486	473	480	379	349	365	289	239	266	278	187	257
18	476	469	472	399	361	381	300	251	288	267	225	240
19	470	443	455	380	363	373	299	247	282	266	213	247
20	455	443	449	404	303	377	298	257	287	259	204	241
21	449	431	442	371	302	346	307	227	287	286	230	256
22	460	343	400	406	380	396	303	259	292	279	180	251
23	387	347	370	409	379	396	322	233	284	307	237	285
24	364	328	349	413	384	402	304	252	282	293	255	279
25	400	348	387	426	388	415	304	270	292	294	258	282
26	398	381	389	433	395	418	313	258	287	311	258	281
27	439	380	409	422	391	411	315	269	296	315	272	296
28	440	426	435	416	357	394	330	275	310	316	244	289
29	441	414	422	374	256	303	335	277	310	305	249	276
30	426	378	402	325	296	305	333	279	308	354	310	336
31	431	296	382	---	---	---	330	275	304	363	266	316
MONTH	532	195	414	433	251	368	519	159	291	363	73	231

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	246	72	132	128	98	116	242	183	221	388	329	355
2	74	65	70	152	116	139	260	194	241	393	339	375
3	78	69	73	165	123	149	257	201	243	375	115	218
4	106	78	90	173	129	158	258	189	241	166	117	143
5	120	107	115	184	135	168	269	205	247	213	144	178
6	146	120	128	188	146	173	276	213	258	249	172	215
7	121	111	115	201	152	183	274	210	257	274	203	248
8	125	112	117	208	163	196	270	201	250	303	235	273
9	144	101	125	213	161	196	274	220	260	333	254	298
10	147	119	140	217	150	198	297	210	269	353	279	321
11	160	124	150	227	168	206	304	230	285	354	286	329
12	160	91	119	229	169	212	299	234	279	345	273	324
13	90	78	81	239	177	215	298	237	284	312	252	284
14	114	80	102	256	171	231	292	207	268	314	247	296
15	130	99	120	256	175	238	287	218	258	338	276	310
16	135	108	128	250	178	234	290	192	270	349	109	220
17	151	112	136	251	187	233	290	207	261	---	---	---
18	169	123	151	251	189	232	282	224	260	---	---	---
19	179	128	166	296	231	263	281	249	273	---	---	---
20	188	135	171	286	192	259	313	237	276	---	---	---
21	193	142	179	281	197	263	338	268	308	---	---	---
22	207	145	186	283	215	253	346	269	313	---	---	---
23	207	147	192	223	177	200	350	296	323	95	76	87
24	210	157	194	178	149	172	366	300	352	109	71	80
25	209	158	194	174	143	159	380	312	361	151	107	129
26	203	92	131	169	146	157	382	307	360	187	126	159
27	91	82	84	199	172	181	395	342	374	230	167	194
28	114	89	105	218	162	200	389	321	369	251	139	226
29	---	---	---	217	165	206	371	308	343	261	195	248
30	---	---	---	221	172	212	339	282	317	277	202	251
31	---	---	---	236	176	215	---	---	---	295	231	274
MONTH	246	65	132	296	98	201	395	183	287	393	71	241

CAPE FEAR RIVER BASIN

02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	301	245	286	192	169	181	293	229	275	261	175	208
2	321	254	297	202	161	177	296	171	250	261	210	233
3	323	255	300	272	209	237	282	215	249	285	242	268
4	342	291	321	302	258	289	312	262	294	300	264	289
5	342	298	333	318	278	303	349	290	319	324	289	307
6	344	279	319	328	294	318	351	314	340	344	312	335
7	337	280	316	322	289	306	353	315	341	356	326	348
8	355	294	328	286	230	254	378	333	353	372	340	362
9	337	290	328	323	288	305	385	344	370	374	336	366
10	380	285	338	344	290	326	379	343	366	379	348	367
11	424	355	398	326	254	293	374	350	366	395	364	379
12	389	330	366	358	311	330	383	357	373	412	373	397
13	367	265	334	361	304	334	389	356	373	391	356	376
14	376	235	301	330	140	227	377	345	364	400	357	386
15	389	341	371	262	198	223	394	363	380	405	372	394
16	378	338	370	288	249	272	385	355	368	403	359	392
17	365	322	354	282	143	181	371	341	354	384	357	378
18	376	324	366	259	196	222	344	84	213	392	359	385
19	374	170	233	285	258	274	81	66	74	386	352	377
20	309	227	261	309	266	295	125	68	89	388	377	384
21	343	294	321	320	258	302	113	76	85	391	347	380
22	351	321	343	316	141	231	124	82	95	377	331	366
23	366	340	357	262	152	203	185	128	153	367	301	345
24	367	340	355	250	184	216	224	177	198	349	320	340
25	375	348	368	265	95	211	237	104	182	381	346	361
26	379	338	366	132	80	101	103	89	93	444	383	411
27	392	369	381	172	115	151	121	89	98	446	404	421
28	404	384	394	184	90	135	183	130	149	420	381	400
29	435	395	422	202	128	158	239	166	192	401	386	393
30	406	137	217	232	148	208	250	203	236	400	366	384
31	---	---	---	278	210	251	265	226	249	---	---	---
MONTH	435	137	335	361	80	242	394	66	253	446	175	358
YEAR	532	65	280									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	15.5	16.0	19.5	18.5	19.0	10.0	8.5	9.0	14.0	13.0	13.5
2	15.5	14.0	14.5	19.0	18.5	18.5	9.5	8.5	9.0	15.5	14.0	14.5
3	14.5	13.0	13.5	18.0	14.5	16.5	11.0	8.5	9.5	15.5	8.0	11.0
4	14.5	14.0	14.0	14.5	14.0	14.5	9.0	8.0	8.5	8.0	6.5	7.0
5	15.5	14.5	15.5	15.5	14.5	15.0	9.0	8.0	8.5	6.5	6.0	6.0
6	17.5	15.5	16.5	15.5	13.0	14.5	8.0	6.5	6.5	6.0	5.0	5.5
7	17.0	16.5	16.5	13.0	10.5	12.0	6.0	5.5	5.5	6.0	4.5	5.5
8	17.5	16.5	17.0	10.5	9.5	10.0	6.0	5.5	5.5	6.0	4.5	5.5
9	17.5	17.0	17.0	10.5	9.0	10.0	6.5	5.5	6.0	6.0	4.0	5.5
10	18.0	16.5	17.5	11.0	9.5	10.5	7.0	6.5	6.5	5.5	3.5	5.0
11	18.0	17.0	17.5	14.0	10.5	12.5	8.5	7.5	8.0	5.5	3.5	5.0
12	18.0	17.0	17.5	14.0	10.0	11.0	9.0	8.5	9.0	5.5	3.0	4.5
13	17.5	17.0	17.0	10.0	8.0	9.0	9.5	9.0	9.5	5.5	3.0	4.0
14	17.5	16.5	17.0	9.0	8.0	8.5	10.5	9.5	10.0	5.5	2.5	4.0
15	17.5	16.5	17.0	10.0	8.5	9.0	11.5	10.5	11.0	5.0	3.0	4.0
16	19.0	17.0	18.0	11.5	9.5	11.0	12.0	11.5	11.5	4.5	1.0	3.0
17	19.5	18.5	19.0	11.0	9.0	10.0	13.0	11.5	12.0	5.5	2.0	4.5
18	19.5	19.0	19.5	9.0	8.5	9.0	13.5	11.5	12.5	5.0	2.0	3.5
19	20.0	19.5	20.0	10.5	9.0	10.0	14.0	12.5	13.5	6.0	4.0	5.0
20	21.0	20.0	20.5	10.5	7.0	9.5	14.0	13.0	13.5	6.0	1.5	4.0
21	21.5	20.5	21.0	7.5	6.5	7.0	14.5	13.5	14.0	2.0	.0	1.0
22	21.5	20.5	21.0	8.0	6.5	7.5	15.0	14.0	14.5	2.0	.0	1.5
23	21.5	21.0	21.0	7.5	6.5	7.0	14.0	10.5	12.0	4.0	1.0	3.0
24	21.0	20.5	20.5	8.0	7.0	7.5	10.5	8.5	9.5	4.5	2.5	3.5
25	21.5	20.0	21.0	8.5	7.5	8.0	12.0	10.5	11.0	5.5	3.5	4.0
26	20.0	19.5	19.5	9.0	8.0	8.5	11.0	8.5	9.5	5.0	2.0	3.0
27	19.5	19.0	19.5	10.5	8.5	9.5	11.5	10.0	11.0	3.5	2.0	3.0
28	21.0	19.0	20.5	13.0	10.5	12.5	12.0	11.0	11.5	5.5	2.0	4.0
29	21.5	21.0	21.5	12.5	8.5	9.5	13.0	12.0	12.5	4.0	1.5	3.0
30	21.0	20.0	20.5	9.5	8.5	9.0	13.5	12.5	13.0	3.5	1.5	2.5
31	20.0	19.5	19.5	---	---	---	14.0	12.5	13.5	4.0	2.0	3.5
MONTH	21.5	13.0	18.5	19.5	6.5	11.0	15.0	5.5	10.0	15.5	.0	5.0

02097314 NEW HOPE CREEK NEAR BLANDS, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.5	3.5	4.5	9.5	8.5	9.0	19.0	17.0	18.0	19.5	17.0	18.5
2	5.5	5.0	5.0	11.0	9.0	10.0	16.5	14.5	15.5	19.5	19.0	19.5
3	5.5	4.0	5.0	11.5	9.0	10.5	15.5	12.5	14.0	19.5	16.0	18.0
4	4.0	3.5	3.5	12.5	10.0	11.0	17.5	13.5	15.5	16.0	14.5	15.5
5	4.0	3.0	3.5	14.5	12.0	13.0	18.5	15.5	17.0	17.0	14.5	15.5
6	3.5	2.0	3.0	13.0	11.0	12.0	18.5	16.5	17.5	19.0	16.0	17.0
7	4.5	3.5	4.0	11.5	9.0	10.5	17.0	15.0	16.0	19.5	17.5	18.5
8	4.0	3.0	3.5	13.5	9.5	11.0	16.5	14.0	14.5	19.5	18.0	18.5
9	2.5	1.5	2.0	13.0	11.5	12.5	14.5	12.5	13.0	18.5	17.0	17.5
10	3.5	1.5	2.5	13.0	10.5	11.5	13.0	10.5	11.5	20.0	18.5	19.0
11	5.0	2.0	3.5	12.0	9.5	10.5	15.5	11.5	13.0	20.0	19.5	20.0
12	6.0	4.0	5.0	14.0	11.5	12.5	17.0	14.0	15.0	20.5	19.5	20.0
13	4.0	2.5	3.5	14.0	11.0	12.0	17.5	15.5	16.5	21.5	19.5	20.5
14	4.5	3.0	3.5	14.0	12.0	13.0	17.5	16.0	16.5	22.0	20.5	21.5
15	4.5	3.5	4.0	13.5	12.5	13.0	17.5	16.0	16.5	22.0	21.0	21.5
16	4.0	2.5	3.5	13.0	10.5	11.5	18.0	16.5	17.0	22.0	19.5	20.5
17	5.5	3.0	4.0	12.5	12.0	12.5	18.0	16.0	17.0	19.5	19.0	19.5
18	6.0	3.5	4.5	12.5	10.5	11.0	18.5	15.0	16.5	19.5	18.0	18.5
19	7.5	5.5	6.0	11.0	8.5	10.0	19.5	16.5	18.0	19.5	17.5	18.5
20	8.5	6.0	7.5	13.0	9.5	11.0	20.0	17.5	19.0	20.0	18.0	19.0
21	8.5	6.0	7.0	12.5	10.5	11.5	20.0	17.5	19.0	21.0	20.0	20.5
22	9.5	7.0	8.0	11.5	9.0	10.0	19.5	17.5	19.0	21.5	20.0	20.5
23	11.0	8.5	9.5	11.0	8.0	9.5	19.5	17.5	19.0	20.5	19.5	19.5
24	13.0	10.0	11.5	11.5	10.5	11.0	19.5	18.0	19.0	19.5	18.0	18.5
25	14.5	12.5	13.5	11.5	10.5	11.0	20.5	19.0	19.5	19.0	17.0	18.0
26	14.0	12.0	13.0	12.5	9.5	11.0	19.5	17.5	19.0	19.5	17.0	18.0
27	13.0	11.5	12.0	14.0	11.0	12.5	19.5	18.5	19.0	20.5	18.0	19.0
28	11.5	9.5	10.5	16.5	12.5	14.0	20.0	19.0	19.5	21.0	19.5	20.0
29	---	---	---	19.0	15.0	17.0	20.0	19.0	19.5	21.0	20.0	20.5
30	---	---	---	20.0	17.5	19.0	19.0	16.5	18.0	21.0	19.5	20.0
31	---	---	---	19.5	16.5	18.0	---	---	---	21.5	20.0	20.5
MONTH	14.5	1.5	6.0	20.0	8.0	12.0	20.5	10.5	17.0	22.0	14.5	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.0	21.5	22.0	22.0	21.0	21.5	25.5	24.5	25.0	23.5	22.0	22.5
2	23.0	22.0	22.5	22.5	21.0	21.5	25.0	23.5	24.0	23.5	22.0	22.5
3	23.0	21.5	22.5	---	---	---	23.5	22.5	23.0	24.0	22.5	23.0
4	23.5	22.0	22.5	---	---	---	23.0	21.5	22.0	24.5	23.0	24.0
5	24.5	23.0	23.5	---	---	---	23.0	21.5	22.5	25.0	23.5	24.5
6	24.0	23.5	23.5	---	---	---	23.5	23.0	23.0	25.0	24.0	24.5
7	23.5	22.5	23.0	---	---	---	25.0	23.5	24.0	25.5	24.0	24.5
8	23.0	22.0	22.5	---	---	---	25.0	24.5	24.5	25.5	24.5	25.0
9	24.0	22.5	23.0	---	---	---	25.5	24.5	24.5	25.5	24.5	25.0
10	25.0	23.5	24.0	---	---	---	26.0	24.5	25.0	25.5	24.5	25.0
11	25.0	24.0	24.5	---	---	---	25.5	24.5	25.0	25.0	24.0	24.5
12	25.0	23.5	24.5	---	---	---	26.0	24.5	25.0	24.5	22.0	23.0
13	23.5	21.5	22.0	---	---	---	26.0	24.5	25.5	22.0	19.5	21.0
14	21.0	19.5	20.0	---	---	---	26.0	25.0	25.5	19.5	18.0	18.5
15	22.0	20.0	21.0	---	---	---	26.0	24.5	25.5	19.0	18.0	18.5
16	23.5	22.0	22.5	---	---	---	26.0	24.5	25.0	19.5	18.0	19.0
17	23.5	22.0	23.0	---	---	---	25.5	24.5	24.5	20.0	18.5	19.0
18	24.0	23.5	23.5	---	---	---	24.5	23.5	24.0	20.5	19.0	20.0
19	24.0	22.5	23.5	---	---	---	23.5	23.0	23.5	20.5	19.5	20.0
20	23.5	22.5	23.0	---	---	---	23.5	22.5	23.0	21.5	20.5	21.0
21	23.0	21.5	22.0	---	---	---	23.5	22.0	22.5	22.5	21.5	22.0
22	23.5	22.0	22.5	---	---	---	22.5	22.0	22.5	22.5	21.5	22.0
23	24.0	22.5	23.0	---	---	---	22.5	21.5	22.0	22.0	21.5	21.5
24	25.0	23.0	24.0	---	---	---	22.5	21.0	21.5	22.5	21.0	22.0
25	25.5	24.0	24.5	---	---	---	22.5	21.5	22.0	23.0	20.5	22.0
26	25.0	24.0	24.5	---	---	---	22.0	21.5	22.0	22.0	21.0	21.0
27	24.0	22.0	23.0	---	---	---	22.5	21.5	22.0	22.5	21.5	22.0
28	23.0	21.5	22.5	---	---	---	23.5	22.0	22.5	21.5	19.5	20.0
29	24.0	23.0	23.5	24.0	23.0	23.5	23.5	22.0	23.0	20.0	19.0	19.5
30	23.5	21.5	22.5	25.0	23.5	24.0	24.0	23.0	23.5	20.0	19.0	19.5
31	---	---	---	25.5	24.0	24.5	24.0	23.0	23.5	---	---	---
MONTH	25.5	19.5	23.0	25.5	21.0	23.0	26.0	21.0	23.5	25.5	18.0	22.0
YEAR	26.0	.0	15.5									

CAPE FEAR RIVER BASIN

02097314 NEW HOPE CREEK NR BLANDS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/22	0915	WATER	0	4.81	31	380	6.60	21.0		.08	15000
84/11/08	0945	WATER	0	4.27	13	242	6.90	10.0	9.5	2.5	90
84/12/06	0930	WATER	0	7.60	246	61	7.20	7.0		9.6	700
85/01/09	0830	WATER	0	3.58	66	96	7.90	3.0		1.4	560
85/02/07	0830	WATER	0	9.15	957	69	6.90	4.0	34.0	10.0	660
85/03/27	0830	WATER	0	5.46	51	127	6.90	10.0		9.0	20
85/04/03	0840	WATER	0	4.60	20	180	6.90	13.0		7.2	10
85/05/07	0850	WATER	0	4.10	22	210	6.60	19.0	32.0	6.2	60
85/06/19	0945	WATER	0	4.85	40	179	6.90	23.0		5.7	2800
85/07/10	0945	WATER	0	3.82	12	325	6.90	25.0		5.0	30
85/08/21	0930	WATER	0.1	7.00	171	78	6.70	24.0	340.0	6.0	34000
85/09/10	0930	WATER	0.1	3.90	15	300	6.70	19.0		8.2	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/22	0915	WATER	0	105	10	280	.02	12.000	12.000	3.000	2.000
84/11/08	0945	WATER	0	108	4	220	.05	8.800	12.000	3.500	2.800
84/12/06	0930	WATER	0	27	160	290	.45	.300	1.000	.490	.200
85/01/09	0830	WATER	0	30	5	170	2.30	.660	1.200	.800	.780
85/02/07	0830	WATER	0	59	9	150	.87	.360	.600	.270	.190
85/03/27	0830	WATER	0	40	72	210	2.30	.550	1.200	1.100	.890
85/04/03	0840	WATER	0	70	51	220	1.50	2.700	3.800	1.900	1.600
85/05/07	0850	WATER	0	87	43	270	7.60	.710	1.700	3.800	3.100
85/06/19	0945	WATER	0	37	150	300	3.00	.130	.600	1.500	1.200
85/07/10	0945	WATER	0	45	55	330	8.60	.680	1.500	4.200	3.500
85/08/21	0930	WATER	0.1	15	820	990	.44	.070	1.100	.470	.140
85/09/10	0930	WATER	0.1	20	6	280	14.00	.100	1.800	5.700	4.600

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/08	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	40
85/02/07	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/07	0850	WATER	0	10K	20K	50K	20K	100K	.2K	100K	40
85/08/21	0930	WATER	0.1	10K		50K	20K	100K	.2K	100K	30

K Less than noted value.

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC

LOCATION.--Lat 35°52'20", long 78°54'49", Durham County, Hydrologic Unit 03030002, on left bank at downstream side of bridge on Secondary Road 1100, 1.3 mi west of Genlee, and 1.6 mi downstream from Burdens Creek.

DRAINAGE AREA.--21.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 235 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair. Slight diurnal fluctuation at low flow. The city of Durham diverted from Neuse River basin an average of 30.4 ft³/s for municipal water supply and returned an average of 13.4 ft³/s as sewage effluent into the Cape Fear River basin, of which 2.7 ft³/s entered upstream from station. About 12.4 ft³/s, was returned to Neuse River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft³/s Jan. 11, 1984, gage height, 10.50 ft; minimum 1.2 ft³/s Sept. 5, 1983, gage height, 3.50 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	1430	*771	*9.71	No other peak greater than base discharge.			

Minimum discharge, 1.8 ft³/s Oct. 7, May 20; minimum gage height, 3.52 ft June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	5.2	3.1	e4.6	587	16	5.3	3.2	4.4	12	6.0	4.0
2	7.8	4.4	2.6	e12	580	12	5.2	3.3	3.6	8.2	5.9	3.6
3	4.9	3.4	51	e62	207	9.7	5.1	55	4.7	5.4	4.1	4.3
4	3.2	2.8	10	e319	34	8.8	5.1	15	5.0	3.8	3.3	4.7
5	2.8	4.1	27	e160	40	9.2	4.6	5.2	4.9	3.5	3.9	4.5
6	3.0	3.7	94	e76	105	8.2	4.1	4.4	5.3	3.4	4.3	4.1
7	2.2	3.7	20	e38	71	7.2	3.2	4.0	6.1	9.1	4.6	3.2
8	2.6	3.2	11	e18	29	6.8	3.7	3.6	5.2	5.6	4.7	3.4
9	3.0	3.1	9.4	11	18	6.1	4.6	4.1	3.9	5.0	4.5	3.9
10	3.3	2.7	9.9	8.9	15	5.4	4.4	4.0	4.5	4.8	3.6	4.2
11	3.8	4.8	8.8	9.5	14	5.7	4.1	3.3	5.1	19	3.2	4.4
12	3.8	5.1	7.5	8.3	243	6.2	4.3	3.5	4.9	6.9	4.0	5.1
13	3.2	4.0	7.7	7.7	145	5.8	4.0	4.3	5.4	4.5	4.4	4.4
14	2.7	3.7	7.3	8.1	28	5.7	4.0	3.8	4.7	61	4.3	3.5
15	3.5	3.4	6.1	7.5	19	5.4	4.4	3.5	3.7	11	4.7	2.8
16	3.7	3.3	5.3	6.8	15	4.4	4.7	28	4.8	17	4.4	3.5
17	3.7	2.9	5.8	9.8	12	4.1	4.9	8.1	6.4	95	8.6	4.1
18	3.9	2.4	6.0	12	11	4.6	5.9	4.1	5.0	13	e68	4.0
19	4.0	2.7	6.0	8.9	11	4.8	3.9	2.7	9.8	6.7	e46	3.8
20	3.3	3.2	5.8	7.4	10	4.7	3.2	2.9	5.2	6.5	10	4.1
21	3.1	3.3	5.7	6.4	9.8	4.7	2.7	3.3	4.4	4.4	70	3.2
22	6.1	2.9	5.1	6.5	8.9	8.6	3.2	6.1	3.0	5.8	15	3.3
23	8.3	2.6	4.8	6.7	8.0	10	3.5	44	3.3	7.1	7.0	4.3
24	4.8	3.0	4.4	6.6	7.7	11	3.4	15	4.2	6.0	4.6	4.3
25	4.3	2.8	4.1	6.6	8.2	27	3.5	9.1	4.7	56	50	4.1
26	4.1	3.3	4.0	6.2	194	15	3.3	6.1	4.9	72	40	4.4
27	3.3	3.6	4.6	5.6	110	9.6	2.8	4.7	4.5	12	13	4.4
28	2.9	6.2	e4.6	6.1	25	8.1	2.5	5.4	4.7	29	7.8	3.4
29	3.5	12	e4.5	9.9	---	7.3	3.0	5.5	3.6	13	6.1	2.8
30	4.0	5.3	e4.5	11	---	6.2	3.3	5.5	3.3	10	5.1	3.6
31	8.0	---	e4.6	72	---	5.2	---	5.3	---	7.0	4.2	---
TOTAL	154.8	116.8	355.2	939.1	2565.6	253.5	119.9	276.0	143.2	523.7	425.3	117.4
MEAN	4.99	3.89	11.5	30.3	91.6	8.18	4.00	8.90	4.77	16.9	13.7	3.91
MAX	34	12	94	319	587	27	5.9	55	9.8	95	70	5.1
MIN	2.2	2.4	2.6	4.6	7.7	4.1	2.5	2.7	3.0	3.4	3.2	2.8
CFSM	.24	.18	.55	1.44	4.34	.39	.19	.42	.23	.80	.65	.19
IN.	.27	.21	.63	1.66	4.52	.45	.21	.49	.25	.92	.75	.21

CAL YR 1984	TOTAL	13449.0	MEAN	36.7	MAX	1000	MIN	2.2	CFSM 1.74	IN.	23.71
WTR YR 1985	TOTAL	5990.5	MEAN	16.4	MAX	587	MIN	2.2	CFSM .78	IN.	10.56

e Estimated

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1982 to September 1985.
WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the B. Everett Jordan Lake. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 872 microsiemens Oct. 15, 1984; minimum, 29 microsiemens Jan. 11, Apr.
WATER TEMPERATURE: Maximum, 29.0°C Aug. 23, 1983; minimum, 0.0°C Dec. 28, 1983, Jan. 2, 22, 23, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 872 microsiemens Oct.15; minimum recorded, 57 microsiemens Oct. 1.
WATER TEMPERATURE: Maximum, 27.5°C July 29; minimum, 0.5°C Jan. 21, 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 16...	1020	3.1	810	7.1	17.5	10	759	4.9	52	--	330
NOV 14...	0830	3.3	600	6.8	10.0	16	765	8.0	71	--	--
DEC 17...	0855	5.2	460	6.3	12.0	10	762	7.1	66	120	260
JAN 30...	0830	18	560	6.6	3.0	40	759	11.6	87	--	--
FEB 26...	1630	256	107	6.4	12.5	200	761	8.9	84	K7000	4300
MAR 18...	1010	3.5	446	6.9	9.0	20	756	10.6	93	--	--
APR 22...	0855	2.2	510	6.4	16.0	20	757	6.5	66	340	80
MAY 23...	0945	78	168	6.7	19.5	1500	762	6.2	68	--	--
JUN 26...	1445	5.1	595	6.8	24.0	25	763	--	--	--	--
JUL 29...	0825	11	210	6.4	24.0	400	758	7.3	87	--	--
AUG 19...	1205	44	130	6.1	24.0	460	756	6.6	79	--	--
SEP 25...	0900	29	500	6.5	20.0	15	768	6.3	69	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 16...	93	44	30	4.3	100	68	5	8.6	170	40	2.1
NOV 14...	98	62	31	5.0	58	51	3	18	55	75	1.5
DEC 17...	92	53	28	5.4	46	50	2	6.9	52	48	1.0
JAN 30...	110	71	33	7.6	57	51	2	4.7	33	95	.50
FEB 26...	29	9	7.4	2.6	8.7	37	.7	1.9	11	10	.10
MAR 18...	81	26	22	6.4	52	57	3	2.9	59	42	1.4
APR 22...	100	65	31	5.8	51	50	2	7.0	55	53	1.3
MAY 23...	44	0	11	4.0	13	37	.9	2.6	15	14	.30
JUN 26...	81	43	25	4.6	65	60	3	9.0	74	59	1.6
JUL 29...	52	11	14	4.1	21	45	1	3.3	26	16	.40
AUG 19...	34	7	9.3	2.7	10	36	.8	2.9	14	8.9	.40
SEP 25...	73	53	22	4.3	62	61	3	9.5	61	61	.90

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT 16...	14	508	400	.69	4.3	22	.030	22	--	.090	--
NOV 14...	12	368	280	.50	3.3	13	.020	13	--	<.010	--
DEC 17...	12	307	230	.42	4.3	11	.090	11	11	.190	.200
JAN 30...	8.2	337	260	.46	16	4.6	.070	4.7	--	.090	--
FEB 26...	6.5	72	61	.10	50	.52	.080	.60	.61	.140	.030
MAR 18...	10	317	230	.43	3.0	.78	.020	.80	--	.080	--
APR 22...	10	305	240	.41	1.8	13	.100	13	--	.180	--
MAY 23...	5.1	98	92	.13	21	1.2	.150	1.3	1.1	.430	.100
JUN 26...	13	387	270	.53	5.3	14	.150	14	--	1.00	--
JUL 29...	9.4	155	120	.21	4.8	2.3	.070	2.4	--	.120	--
AUG 19...	7.3	100	73	.14	12	1.0	.100	1.1	.84	.320	.200
SEP 25...	11	330	240	.45	26	12	.030	12	--	.220	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 16...	--	.91	--	1.0	--	--	23	100	--	6.30
NOV 14...	--	--	--	1.9	--	--	15	66	--	6.90
DEC 17...	.26	1.2	--	1.4	--	--	12	55	--	4.50
JAN 30...	--	1.2	--	1.3	--	--	6.0	27	--	1.40
FEB 26...	.04	.46	--	.60	--	--	1.2	5.3	--	.250
MAR 18...	--	1.1	--	1.2	--	--	2.0	8.9	--	.120
APR 22...	--	.52	--	.70	--	--	14	61	--	4.30
MAY 23...	.13	.67	--	1.1	--	--	2.4	11	--	.780
JUN 26...	--	1.6	--	2.6	--	--	17	73	--	6.30
JUL 29...	--	1.1	--	1.2	--	--	3.6	16	--	1.10
AUG 19...	.26	2.5	1.7	2.8	.90	1.9	3.9	17	2.7	.630
SEP 25...	--	.88	--	1.1	--	--	13	58	--	4.90

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT 16...	--	6.20	--	--	2	1	10	29	1000	2
NOV 14...	--	5.00	--	--	1	1	10	43	430	3
DEC 17...	4.00	4.40	4.00	12	1	<1	10	21	490	1
JAN 30...	--	1.20	--	--	<1	<1	10	--	--	5
FEB 26...	.130	.280	.100	.31	--	<1	10	12	6000	10
MAR 18...	--	.090	--	--	1	<1	20	12	920	1
APR 22...	--	4.20	--	--	2	1	10	18	600	1
MAY 23...	.170	.360	.180	.55	<1	1	30	37	18000	30
JUN 26...	--	5.90	--	--	4	1	<10	30	1100	<1
JUL 29...	--	1.00	--	--	2	1	20	20	10000	10
AUG 19...	.500	.630	.480	1.5	1	<1	30	29	13000	20
SEP 25...	--	4.70	--	--	2	2	10	99	920	34

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 16...	130	<.1	<1	80	6.5	--	12	.10
NOV 14...	60	<.1	<1	70	8.7	--	9	.08
DEC 17...	90	.7	<1	60	6.5	--	11	.15
JAN 30...	--	.3	<1	60	7.9	--	14	.68
FEB 26...	180	.1	--	70	14	.01	--	--
MAR 18...	120	.1	<1	90	11	--	9	.09
APR 22...	230	.1	<1	60	7.2	--	19	.11
MAY 23...	1100	.3	<1	120	11	--	1060	223
JUN 26...	130	<.1	<1	110	10	--	36	.50
JUL 29...	280	.3	<1	80	13	--	215	6.6
AUG 19...	370	.1	<1	110	14	.03	418	50
SEP 25...	180	.2	<1	480	6.5	--	28	2.2

CAPE FEAR RIVER BASIN

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	470	57	162	578	520	556	403	436	455	---	---	---
2	293	129	181	547	489	523	501	453	486	---	---	---
3	344	214	273	544	525	534	470	110	181	---	---	---
4	473	357	394	539	510	535	314	177	239	---	---	---
5	547	481	518	525	487	505	372	322	345	---	---	---
6	534	475	516	533	482	495	---	---	---	---	---	---
7	564	488	522	---	---	---	---	---	---	---	---	---
8	584	532	553	---	---	---	---	---	---	---	---	---
9	617	564	575	---	---	---	---	---	---	321	235	281
10	680	572	598	---	---	---	---	---	---	365	291	322
11	691	624	654	---	---	---	---	---	---	378	295	330
12	699	614	650	---	---	---	---	---	---	382	303	344
13	724	625	668	---	---	---	---	---	---	360	332	345
14	800	645	698	631	594	602	---	---	---	392	341	362
15	872	761	808	714	645	689	---	---	---	422	328	362
16	818	759	787	725	701	710	---	---	---	488	375	411
17	779	688	726	778	704	749	472	421	456	512	456	483
18	692	632	660	801	746	765	497	448	474	479	363	429
19	646	591	616	746	705	725	531	476	495	466	383	424
20	624	581	601	696	663	680	601	538	558	464	412	440
21	591	575	583	696	649	669	611	595	602	487	414	447
22	578	510	544	660	627	644	604	587	597	502	447	475
23	504	257	315	656	611	633	587	550	573	536	456	490
24	442	358	394	641	589	613	584	542	559	559	492	524
25	491	444	468	623	580	599	571	526	538	564	486	526
26	515	487	499	604	567	584	526	493	508	594	552	568
27	525	478	505	580	545	564	511	481	493	612	510	543
28	560	512	540	630	577	605	---	---	---	562	512	544
29	584	553	564	506	377	415	---	---	---	711	466	553
30	597	572	581	442	407	423	---	---	---	703	517	587
31	587	563	574	---	---	---	---	---	---	695	174	413
MONTH	872	57	540	801	377	600	611	110	472	711	174	444

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	162	78	95	301	193	239	507	449	473	595	541	563
2	82	65	70	289	228	253	535	458	498	583	543	562
3	105	68	86	320	230	280	538	484	509	624	382	487
4	151	108	127	362	284	317	541	484	508	465	414	427
5	278	148	173	407	297	345	520	468	491	485	403	444
6	165	132	147	445	318	381	500	451	471	440	372	410
7	152	117	134	466	347	399	508	438	471	478	419	444
8	214	149	173	472	367	413	514	449	481	519	481	500
9	235	188	210	425	379	406	538	437	486	555	522	538
10	236	203	220	408	349	381	536	461	485	592	560	574
11	263	219	241	405	368	384	580	501	540	619	594	605
12	257	71	111	416	341	382	631	558	581	637	619	627
13	125	89	105	428	340	385	639	570	590	650	628	641
14	177	122	147	560	368	414	644	558	572	663	625	647
15	226	165	187	576	466	518	605	498	551	685	653	669
16	244	202	225	539	427	460	589	497	531	---	---	---
17	253	204	229	456	418	435	618	530	572	---	---	---
18	270	222	244	467	411	435	630	414	506	---	---	---
19	380	257	295	488	426	454	588	482	535	---	---	---
20	376	291	333	483	432	456	584	506	541	---	---	---
21	376	299	340	550	486	521	541	507	522	---	---	---
22	395	308	355	591	467	534	543	494	513	---	---	---
23	401	322	358	529	300	411	527	496	507	---	---	---
24	355	314	333	532	311	400	524	505	516	---	---	---
25	375	324	343	553	276	406	530	502	513	---	---	---
26	335	105	143	396	236	285	559	506	527	---	---	---
27	149	104	122	437	291	334	590	551	566	---	---	---
28	205	140	159	461	362	421	629	590	612	---	---	---
29	---	---	---	517	396	451	627	588	609	---	---	---
30	---	---	---	511	411	467	620	527	575	---	---	---
31	---	---	---	530	445	485	---	---	---	---	---	---
MONTH	401	65	204	591	193	402	644	414	528	685	372	543

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	725	712	718	376	330	345	346	311	326
2	---	---	---	769	720	737	353	348	351	405	337	367
3	---	---	---	781	750	767	466	352	425	548	391	468
4	---	---	---	780	758	773	577	466	542	545	524	534
5	---	---	---	788	748	767	614	580	603	614	536	578
6	---	---	---	752	739	747	621	608	614	629	607	619
7	---	---	---	738	724	733	617	602	612	650	622	637
8	---	---	---	746	723	734	621	605	615	653	631	640
9	---	---	---	736	709	723	636	617	621	625	547	567
10	---	---	---	713	663	687	---	---	---	562	533	551
11	---	---	---	698	243	452	---	---	---	572	547	560
12	---	---	---	485	346	413	---	---	---	568	553	564
13	---	---	---	517	376	489	---	---	---	598	554	572
14	---	---	---	---	---	---	---	---	---	635	594	617
15	---	---	---	---	---	---	---	---	---	635	606	621
16	---	---	---	---	---	---	---	---	---	803	613	678
17	---	---	---	---	---	---	---	---	---	719	632	684
18	---	---	---	---	---	---	---	---	---	721	699	708
19	551	525	535	---	---	---	---	---	---	696	665	683
20	594	536	563	---	---	---	209	161	181	693	675	688
21	618	583	603	---	---	---	549	116	203	677	655	665
22	633	607	618	---	---	---	289	262	272	656	606	632
23	632	618	622	---	---	---	422	284	372	592	473	520
24	621	603	611	---	---	---	428	403	415	499	450	465
25	610	595	601	---	---	---	617	115	299	507	492	499
26	590	572	577	---	---	---	272	122	186	595	498	533
27	635	588	615	---	---	---	333	226	282	588	513	557
28	703	641	655	---	---	---	361	217	267	587	566	578
29	736	709	726	261	209	229	514	227	314	598	569	582
30	731	717	724	334	297	317	424	261	308	580	521	549
31	---	---	---	340	327	334	349	279	304	---	---	---
MONTH	736	525	621	788	209	601	636	115	387	803	311	575
YEAR	872	57	481									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	16.0	16.0	22.0	19.5	20.5	10.5	9.0	10.0	---	---	---
2	16.5	15.0	15.5	23.0	19.5	20.5	10.5	9.0	9.5	---	---	---
3	16.5	13.5	15.0	19.5	16.5	18.0	11.0	9.0	9.5	---	---	---
4	16.5	14.0	15.5	16.5	16.0	16.0	9.5	9.0	9.5	---	---	---
5	18.0	16.0	16.5	18.0	16.0	16.5	11.0	7.5	9.5	---	---	---
6	19.5	17.0	18.0	18.0	16.0	17.0	7.5	7.0	7.0	---	---	---
7	18.0	16.5	17.0	---	---	---	7.5	6.5	7.0	---	---	---
8	18.5	17.0	17.5	---	---	---	7.5	6.5	7.0	---	---	---
9	19.0	16.5	17.5	---	---	---	7.5	6.0	6.5	7.5	5.5	6.5
10	22.0	17.5	19.0	---	---	---	8.0	6.5	7.0	7.5	5.0	6.0
11	20.5	18.5	19.5	---	---	---	9.5	7.5	8.5	7.0	5.5	6.0
12	20.5	17.5	18.5	---	---	---	9.5	9.0	9.0	6.5	4.5	5.5
13	18.5	16.5	17.5	---	---	---	10.5	9.5	9.5	6.5	4.0	4.5
14	17.5	15.5	16.5	11.0	9.5	10.5	11.5	10.0	11.0	5.5	3.5	4.0
15	18.0	15.0	16.5	11.5	9.5	10.5	12.5	11.0	11.5	5.5	3.5	4.5
16	19.0	16.5	17.5	13.5	11.5	12.5	12.5	11.5	12.0	6.5	3.5	4.5
17	19.5	19.0	19.0	13.0	10.0	11.0	14.0	12.0	13.0	6.0	3.5	5.5
18	20.0	19.5	19.5	10.0	8.5	9.5	14.0	12.5	13.5	5.5	3.0	4.0
19	21.0	19.5	20.5	11.0	10.0	11.0	16.0	13.5	14.5	6.0	4.5	5.0
20	22.0	19.5	20.5	11.5	10.5	10.5	16.0	14.5	15.0	6.0	2.0	4.0
21	21.5	20.0	20.5	10.5	8.0	8.5	17.0	15.0	15.5	3.0	.5	1.5
22	22.0	20.5	21.0	9.0	8.0	8.5	17.0	15.0	16.0	3.0	.5	2.0
23	22.0	21.0	21.5	8.0	6.5	7.0	15.0	12.0	13.5	4.5	2.0	3.0
24	22.0	20.0	21.0	8.5	6.5	7.0	12.0	9.5	11.0	5.5	3.0	4.0
25	21.5	21.0	21.5	8.5	6.5	7.5	14.0	11.5	12.5	5.5	4.0	5.0
26	22.0	20.0	20.5	9.5	7.5	8.5	11.5	8.5	10.0	5.5	2.5	3.5
27	20.5	18.5	20.0	12.0	9.0	9.5	13.0	11.0	11.5	4.5	1.0	2.5
28	23.0	19.5	20.5	14.0	12.0	12.5	---	---	---	5.0	3.0	4.0
29	22.5	21.0	21.5	13.0	10.0	11.5	---	---	---	4.5	2.0	3.0
30	22.0	21.0	21.5	10.5	8.5	9.5	---	---	---	4.0	2.0	3.0
31	23.0	20.0	21.0	---	---	---	---	---	---	4.5	1.0	3.0
MONTH	23.0	13.5	19.0	23.0	6.5	12.0	17.0	6.0	10.5	7.5	.5	4.0

CAPE FEAR RIVER BASIN

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.5	3.5	4.0	11.0	8.5	9.5	18.5	16.5	17.5	19.0	17.0	18.0
2	4.5	4.0	4.0	11.0	9.0	10.0	17.0	14.0	15.5	19.5	18.0	19.0
3	5.0	3.0	3.5	11.5	9.5	10.5	15.5	12.0	14.0	20.0	18.0	19.0
4	4.5	2.5	3.5	11.5	10.5	11.0	17.0	13.0	15.0	18.5	17.0	17.5
5	3.0	2.0	2.5	15.0	11.5	12.5	17.5	15.0	16.5	18.0	17.0	17.5
6	2.5	1.5	2.0	13.5	11.0	12.5	18.0	16.5	17.0	18.5	17.0	17.5
7	4.5	2.5	3.5	12.5	9.0	10.5	17.0	14.0	15.5	18.5	18.0	18.5
8	4.0	2.0	3.0	12.5	9.5	11.0	16.5	13.0	14.5	19.0	18.5	18.5
9	3.5	1.0	2.0	13.5	12.0	12.5	15.5	12.0	13.5	18.5	18.0	18.5
10	3.5	1.0	2.0	12.5	10.0	11.0	13.5	10.0	12.0	19.0	18.0	18.5
11	4.0	1.0	2.5	11.0	9.5	10.0	14.0	10.5	12.5	19.5	18.5	19.0
12	6.0	3.5	4.5	12.5	10.5	11.5	16.0	12.5	14.5	19.5	19.0	19.5
13	3.5	2.0	3.0	12.5	10.0	11.5	17.0	14.0	15.5	20.0	19.5	19.5
14	5.0	2.5	3.5	13.5	11.0	12.0	17.0	15.5	16.0	21.0	20.0	20.5
15	6.5	2.5	4.5	14.0	11.5	12.5	17.0	16.0	16.5	21.0	20.5	21.0
16	5.5	3.0	4.0	12.0	9.0	10.5	17.5	16.0	17.0	21.0	20.0	20.5
17	5.5	3.0	4.5	12.0	11.0	11.5	17.5	15.5	16.5	20.0	19.5	20.0
18	7.5	4.0	5.5	11.5	8.5	10.0	17.5	14.5	16.0	19.5	19.0	19.0
19	9.0	5.5	6.5	10.5	7.0	9.0	18.5	15.5	17.0	19.0	18.0	18.5
20	10.0	7.5	8.0	12.0	8.5	10.0	19.0	16.0	17.5	19.0	18.0	18.5
21	9.5	6.5	8.0	11.5	10.0	11.0	19.5	16.0	17.5	19.5	18.5	19.0
22	10.0	8.0	9.0	11.0	8.5	10.0	18.5	16.0	17.0	19.5	19.0	19.5
23	12.5	8.5	10.5	10.5	8.5	9.0	18.0	16.0	17.0	20.0	19.0	19.5
24	14.5	11.0	12.5	11.0	10.0	10.5	18.5	16.5	17.5	20.0	19.5	19.5
25	16.0	13.0	14.5	11.5	10.0	10.5	19.0	17.5	18.0	19.5	18.5	19.0
26	14.5	11.5	13.0	12.0	9.0	11.0	18.5	16.5	17.5	19.0	18.0	18.5
27	13.0	10.5	12.0	13.5	11.0	12.0	18.5	17.0	18.0	19.0	18.0	18.5
28	11.5	9.0	10.5	15.5	12.5	14.0	20.0	18.0	18.5	19.5	18.5	19.0
29	---	---	---	18.0	14.5	16.0	19.5	18.0	19.0	20.0	19.5	19.5
30	---	---	---	19.5	17.0	18.0	18.0	16.0	17.5	20.0	19.5	19.5
31	---	---	---	19.0	17.0	18.0	---	---	---	20.0	19.5	20.0
MONTH	16.0	1.0	6.0	19.5	7.0	11.5	20.0	10.0	16.5	21.0	17.0	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.0	20.0	20.5	21.5	21.0	21.5	25.0	24.0	24.5	24.0	22.0	23.0
2	21.5	20.5	21.0	22.0	21.0	21.0	24.5	23.0	23.5	24.0	22.0	23.0
3	22.0	21.0	21.5	22.0	21.0	21.5	23.0	20.5	22.0	24.5	22.5	23.5
4	22.0	21.5	21.5	22.5	21.5	22.0	22.0	20.0	21.0	25.5	23.0	24.0
5	22.5	22.0	22.0	22.5	22.0	22.5	23.0	20.0	21.5	25.5	23.5	24.5
6	23.0	22.5	22.5	23.0	22.5	22.5	22.5	21.5	22.0	26.0	23.5	25.0
7	23.0	22.5	22.5	23.0	22.5	22.5	24.0	22.5	23.0	26.0	24.0	25.0
8	22.5	22.0	22.5	23.0	22.5	22.5	24.5	23.5	24.0	26.5	24.0	25.0
9	22.5	22.0	22.5	23.5	22.5	23.0	25.0	23.5	24.0	26.5	24.0	25.0
10	23.0	22.5	23.0	23.5	23.0	23.0	---	---	---	26.5	24.5	25.5
11	24.0	23.0	23.5	24.5	23.0	23.5	---	---	---	25.5	24.5	25.0
12	24.0	23.5	24.0	24.0	23.0	23.5	---	---	---	24.5	22.0	23.0
13	23.5	22.0	23.0	24.5	23.5	23.5	---	---	---	22.0	19.5	21.0
14	22.5	20.0	21.0	24.0	23.0	23.0	---	---	---	19.5	17.0	18.0
15	22.0	20.5	21.0	23.5	23.0	23.0	---	---	---	19.0	16.0	17.5
16	22.5	21.5	22.0	24.0	23.0	23.5	---	---	---	19.0	16.0	17.5
17	22.5	22.0	22.5	23.5	23.0	23.0	---	---	---	19.5	16.5	18.0
18	23.5	22.0	22.5	23.5	23.0	23.5	---	---	---	20.0	17.0	19.0
19	22.5	22.0	22.5	23.5	23.0	23.5	---	---	---	20.0	17.0	19.0
20	22.5	22.5	22.5	23.5	23.0	23.5	24.5	23.5	24.0	21.0	19.0	20.0
21	23.0	22.0	22.0	23.5	23.5	23.5	24.5	22.5	23.5	21.5	19.5	20.5
22	22.5	22.0	22.0	24.0	23.5	23.5	24.5	22.5	23.5	21.0	20.5	20.5
23	23.0	22.5	22.5	24.0	23.5	24.0	23.5	22.0	22.5	21.0	20.0	20.5
24	23.5	22.5	23.0	24.0	23.5	23.5	22.5	21.0	22.0	22.5	19.5	20.5
25	24.0	23.5	23.5	23.5	23.0	23.0	23.5	21.5	22.5	21.5	19.5	20.5
26	24.5	22.5	23.5	23.0	23.0	23.0	24.0	23.0	23.5	21.0	19.5	20.0
27	22.5	21.5	22.0	23.5	23.0	23.5	24.5	22.5	23.5	22.5	20.0	21.0
28	22.0	20.5	21.0	24.0	23.0	23.5	24.5	23.0	23.5	20.5	18.0	19.0
29	22.0	21.5	21.5	27.5	23.5	25.0	24.5	22.5	23.5	20.0	17.0	18.5
30	22.0	21.5	21.5	26.5	22.5	23.5	25.5	23.5	24.0	20.0	17.5	18.5
31	---	---	---	25.0	23.5	24.0	25.0	22.5	23.5	---	---	---
MONTH	24.5	20.0	22.0	27.5	21.0	23.0	25.5	20.0	23.0	26.5	16.0	21.5
YEAR	27.5	.5	16.0									

02097419555 NORTHEAST CREEK AT SECONDARY ROAD 1100 NR GENLEE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/22	0845	WATER	0	4.12	4	500	6.30	20.0		4.2	50
84/11/08	0910	WATER	0	4.07	3	410	6.60	10.0	7.0	8.2	680
84/12/06	0900	WATER	0	7.42	120	60	7.20	7.0		10.3	520
85/01/09	0800	WATER	0	4.49	10	135	7.90	3.0		10.2	30
85/02/07	0800	WATER	0	6.94	86	70	6.80	4.0	65.0	11.1	390
85/03/27	0810	WATER	0	4.42	9	206	7.00	9.0		8.6	890
85/04/03	0800	WATER	0	3.96	4	305	6.90	12.0		7.8	10
85/05/07	0825	WATER	0	3.85	3	322	6.80	19.0	45.0	6.4	300
85/06/19	0910	WATER	0	4.47	16	242	6.90	23.0		5.5	1100
85/07/10	0915	WATER	0	3.69	4	490	6.90	24.0		6.0	1200
85/08/21	0900	WATER	0.1	6.78	95	103	6.80	23.0	900.0	6.8	13000
85/09/18	0900	WATER	0.1	3.72	3	498	6.80	16.0		6.4	110

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/22	0845	WATER	0	32	12	420	25.00	.080	1.100	6.300	5.800
84/11/08	0910	WATER	0	36	6	450	27.00	.080	1.200	5.700	5.300
84/12/06	0900	WATER	0	28	280	400	.60	.120	.800	.500	.260
85/01/09	0800	WATER	0	43	25	260	4.70	.220	.800	1.300	1.200
85/02/07	0800	WATER	0	65	29	190	.60	.040	.500	.230	.140
85/03/27	0810	WATER	0	56	37	270	4.60	.500	1.300	1.800	1.500
85/04/03	0800	WATER	0	50	12	320	12.00	.040	2.700	4.500	4.000
85/05/07	0825	WATER	0	100	52	370	11.00	.170	1.200	4.300	3.500
85/06/19	0910	WATER	0	48	170	360	3.60	.080	.500	1.600	1.400
85/07/10	0915	WATER	0	35	56	440	13.00	.190	2.500	5.500	4.400
85/08/21	0900	WATER	0.1	28	1200	1300	.73	.030	.900	.680	.280
85/09/18	0900	WATER	0.1	31	8	440	14.00	.420	2.200	6.100	4.800

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/08	0910	WATER	0	10K	20K	50K	70	100K	.2K	100K	110
85/02/07	0800	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/07	0825	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/06/19	0910	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/07/10	0915	WATER	0	10K	20K	50K	30	100K	.2K	100K	120
85/08/21	0900	WATER	0.1	10K	20K	50K	20	100K	.2K	100K	90
85/09/18	0900	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	110

K Less than noted value.

CAPE FEAR RIVER BASIN

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC

LOCATION.--Lat 35°53'36", long 79°01'10", Orange County, Hydrologic Unit 03030002, on left bank 3.8 mi downstream from U.S. Highway 501, and 2.5 mi southeast of Chapel Hill.

DRAINAGE AREA.--41.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 245 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair, except those below 10 ft^3/s, which are poor. Slight diurnal fluctuation at low flow.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,240 ft^3/s Mar. 6, 1984, gage height, 12.75 ft; minimum daily, 0.60 ft^3/s Nov. 26, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	0800	*1,380	*10.53	Aug. 18	1200	1,080	9.51
Feb. 2	0730	874	8.77	Aug. 25	2400	1,130	9.70

Minimum daily discharge, 11.0 ft^3/s, Oct. 17-20, Dec. 24-31, Jan. 1, June 27, 28, July 4, 16, 18, 20, 21, 24, Aug. 11, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	13	13	11	742	43	26	e17	13	19	19	23
2	13	13	19	19	620	38	e25	e19	13	14	14	22
3	12	13	49	262	187	34	e24	e113	13	12	12	20
4	12	13	15	400	84	32	e22	e34	13	11	12	19
5	12	13	49	169	81	31	e22	e15	14	12	12	19
6	12	13	29	67	126	29	e22	e20	13	12	12	18
7	12	13	16	42	102	29	e21	16	13	14	12	18
8	12	13	15	33	55	28	22	14	13	12	12	17
9	12	13	14	29	41	27	23	13	12	12	12	17
10	12	12	14	27	35	27	23	14	13	12	12	18
11	12	14	14	26	33	27	22	13	13	12	11	17
12	12	13	14	26	237	28	23	13	14	12	12	18
13	12	13	14	25	103	e24	22	14	13	12	12	18
14	12	13	14	24	57	e24	22	e17	13	13	12	18
15	12	13	14	26	43	e24	23	e17	12	12	11	20
16	12	13	13	23	36	e24	23	e49	14	11	30	18
17	11	13	12	25	33	e24	32	23	14	12	25	17
18	11	13	12	26	31	e25	e23	18	13	11	563	17
19	11	14	12	26	30	e24	e19	14	14	13	160	17
20	11	13	12	26	30	e23	e18	14	12	11	42	17
21	12	13	12	25	29	e23	e17	16	12	11	52	16
22	12	12	12	23	28	36	e16	51	12	13	31	16
23	12	12	12	22	27	40	14	186	12	13	24	16
24	12	13	11	23	28	50	14	32	12	11	22	16
25	12	12	11	23	28	56	14	24	12	81	340	16
26	12	12	11	23	225	36	14	20	12	18	360	16
27	12	12	11	23	110	31	13	18	11	13	69	17
28	12	20	11	24	58	29	14	17	11	21	33	16
29	13	15	11	25	---	29	14	17	17	14	26	15
30	13	13	11	24	---	27	e15	15	15	13	23	16
31	13	---	11	59	---	27	---	14	---	13	29	---
TOTAL	413	395	488	1606	3239	949	602	877	388	470	2016	528
MEAN	13.3	13.2	15.7	51.8	116	30.6	20.1	28.3	12.9	15.2	65.0	17.6
MAX	53	20	49	400	742	56	32	186	17	81	563	23
MIN	11	12	11	11	27	23	13	13	11	11	11	15
CFSM	.32	.32	.38	1.26	2.83	.75	.49	.69	.31	.37	1.59	.43
IN.	.37	.36	.44	1.46	2.94	.86	.55	.80	.35	.43	1.83	.48

CAL YR 1984 TOTAL 23813.7 MEAN 65.1 MAX 1130 MIN 9.8 CFSM 1.59 IN. 21.61

WTR YR 1985 TOTAL 11971 MEAN 32.8 MAX 742 MIN 11 CFSM .80 IN. 10.86

e Estimated

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1982 to September 1985.
WATER TEMPERATURE: November 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from November 1982 to September 1985.

REMARKS.--Station operated to define the chemical-quality characteristics of inflow into the B. Everett Jordan Lake. Interruptions in the daily record were due to malfunctions of the monitor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, ≥1,100 microsiemens Feb. 6, 1983, Feb. 6, 1984; minimum recorded, 39 microsiemens Apr. 4, 1984.
WATER TEMPERATURE: Maximum, 30.0°C July 21, 1984; minimum recorded, 1.0°C Jan. 22, 1984.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 880 microsiemens Jan. 28; minimum, 48 microsiemens Aug. 18.
WATER TEMPERATURE: Maximum, 29.0°C Aug. 14-16; minimum, 2.0°C Jan. 21, Feb. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
16...	1230	16	440	7.0	21.0	10	759	7.3	82	--	K64
NOV											
14...	1015	13	450	6.9	15.0	15	766	9.1	90	--	--
DEC											
17...	1100	12	460	6.0	15.0	15	751	8.2	83	180	2600
JAN											
30...	1025	26	390	6.6	8.5	10	760	10.8	93	--	--
FEB											
26...	1430	274	86	6.5	11.5	70	761	11.1	102	K300	K700
MAR											
18...	1245	26	268	6.6	13.0	20	756	10.4	100	--	--
APR											
22...	1115	17	400	6.5	21.0	20	758	8.0	90	1000	K40
MAY											
23...	1220	152	117	6.6	22.5	40	761	7.8	90	--	--
JUN											
26...	1315	14	565	7.4	26.0	25	763	--	--	--	--
JUL											
29...	1125	15	310	6.7	25.0	20	758	7.8	95	--	--
AUG											
19...	1040	151	98	6.3	24.0	100	754	8.1	97	--	--
SEP											
25...	1330	19	360	6.9	24.0	25	767	7.8	92	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

CAPE FEAR RIVER BASIN

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC---Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT											
16...	48	0	13	3.8	54	67	4	8.2	41	36	1.1
NOV											
14...	49	6	13	4.1	65	70	4	9.5	43	37	1.1
DEC											
17...	47	5	12	4.1	55	68	4	8.3	37	25	.70
JAN											
30...	42	20	11	3.6	54	69	4	7.4	32	36	.80
FEB											
26...	20	0	5.0	1.9	7.7	42	.8	2.1	11	6.6	.10
MAR											
18...	32	3	7.9	3.0	35	69	3	1.6	26	21	.60
APR											
22...	41	9	11	3.4	50	68	3	7.2	30	25	.80
MAY											
23...	26	0	6.8	2.2	9.5	42	.8	2.2	8.1	7.4	.20
JUN											
26...	41	0	11	3.4	94	80	7	8.7	40	33	1.2
JUL											
29...	41	0	11	3.4	45	66	3	6.5	31	23	.70
AUG											
19...	27	0	6.9	2.3	8.4	37	.7	3.1	9.3	6.0	.10
SEP											
25...	44	1	12	3.4	52	67	4	9.7	42	34	1.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT											
16...	18	244	200	.33	11	15	.010	15	--	.120	--
NOV											
14...	17	297	220	.40	10	16	.010	16	--	.490	--
DEC											
17...	17	270	180	.37	8.7	18	.020	18	15	.350	.080
JAN											
30...	16	249	170	.34	17	14	.020	14	--	.080	--
FEB											
26...	12	72	59	.10	53	.77	.030	.80	--	.230	.180
MAR											
18...	13	207	130	.28	15	--	<.010	.80	--	.070	--
APR											
22...	14	241	160	.33	11	15	.070	15	--	.470	--
MAY											
23...	11	72	64	.10	30	--	<.010	1.1	1.0	.140	.120
JUN											
26...	17	347	280	.47	13	18	.020	18	--	.070	--
JUL											
29...	16	200	170	.27	8.1	6.4	.030	6.4	--	.080	--
AUG											
19...	11	149	78	.20	61	.98	.020	1.0	.67	.080	.060
SEP											
25...	16	184	200	.25	9.4	--	<.010	8.3	--	.140	--

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC---Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	NITROGEN DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 16...	--	1.2	--	1.3	--	--	16	72	--	4.90
NOV 14...	--	2.7	--	3.2	--	--	19	85	--	5.30
DEC 17...	.10	--	1.6	--	--	1.7	--	--	17	4.10
JAN 30...	--	1.7	--	1.8	--	--	16	70	--	3.70
FEB 26...	.23	1.1	--	1.3	--	--	2.1	9.3	--	.330
MAR 18...	--	.53	--	.60	--	--	1.4	6.2	--	--
APR 22...	--	.73	--	1.2	--	--	16	72	--	5.00
MAY 23...	.15	1.5	--	1.6	--	--	2.7	12	--	.500
JUN 26...	--	1.0	--	1.1	--	--	19	85	--	4.70
JUL 29...	--	.52	--	.60	--	--	7.0	31	--	2.70
AUG 19...	.08	1.7	1.6	1.8	.10	1.7	2.8	12	2.4	.350
SEP 25...	--	.86	--	1.0	--	--	9.3	41	--	4.80

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
OCT 16...	--	4.40	--	--	<1	1	10	11	440	1
NOV 14...	--	4.00	--	--	1	1	10	13	360	4
DEC 17...	4.10	3.80	--	--	1	<1	10	13	390	1
JAN 30...	--	3.00	--	--	<1	<1	20	--	--	4
FEB 26...	.280	.230	.240	.74	--	<1	10	4	2000	8
MAR 18...	--	--	--	--	<1	<1	20	9	360	<1
APR 22...	--	4.90	--	--	1	<1	<10	9	300	1
MAY 23...	.340	.360	.320	.98	<1	1	10	6	1900	10
JUN 26...	--	4.60	--	--	3	1	<10	17	300	6
JUL 29...	--	2.60	--	--	2	<1	10	10	3600	8
AUG 19...	.300	.300	.290	.89	<1	<1	10	7	2700	7
SEP 25...	--	4.80	--	--	1	3	20	72	310	33

CAPE FEAR RIVER BASIN

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC---Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT								
16...	90	.1	<1	50	6.1	—	12	.52
NOV								
14...	130	<.1	<1	40	8.9	—	9	.32
DEC								
17...	110	.2	<1	30	7.1	—	9	.29
JAN								
30...	—	.2	<1	40	6.8	—	8	.56
FEB								
26...	150	.1	—	60	5.7	.03	—	--
MAR								
18...	50	.1	<1	30	8.8	—	4	.28
APR								
22...	80	.3	<1	40	5.7	—	3	.14
MAY								
23...	320	.3	<1	30	5.5	.05	115	47
JUN								
26...	50	.1	<1	70	8.4	—	12	.45
JUL								
29...	80	.1	<1	30	7.7	—	52	2.1
AUG								
19...	240	<.1	<1	90	7.2	.06	71	29
SEP								
25...	100	<.1	<1	--	—	—	23	1.2

CAPE FEAR RIVER BASIN

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC---Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	237	133	173	470	422	450	399	348	379	432	358	410
2	347	222	281	458	402	445	406	127	367	532	386	457
3	452	328	382	472	414	456	289	115	204	538	139	433
4	446	372	406	510	449	467	356	251	310	645	94	369
5	474	371	410	505	438	473	358	169	269	125	98	111
6	406	367	388	500	426	456	254	155	202	163	121	141
7	513	367	423	486	448	468	416	235	305	195	139	173
8	487	418	464	474	406	446	405	279	339	238	163	204
9	465	362	420	458	406	437	453	308	396	281	181	237
10	457	423	439	479	443	456	500	328	440	398	207	276
11	451	387	423	465	382	426	502	412	486	330	227	280
12	465	383	419	411	380	394	543	440	524	340	244	288
13	435	365	409	441	407	429	563	430	532	354	259	302
14	434	380	411	478	433	451	598	485	556	358	242	313
15	449	380	422	479	399	451	616	547	583	325	244	295
16	447	380	426	463	388	433	613	453	568	379	270	337
17	475	403	442	486	409	446	466	395	418	372	291	339
18	451	362	413	466	403	441	425	335	393	335	270	309
19	428	361	409	456	349	409	425	335	392	362	265	304
20	442	384	419	440	332	409	440	349	399	384	264	307
21	420	310	379	460	380	423	414	332	383	469	381	428
22	406	308	358	444	374	411	410	336	381	433	381	401
23	429	314	395	418	356	394	414	339	383	403	370	383
24	453	352	418	422	354	394	415	339	382	397	334	369
25	471	400	449	439	357	408	395	331	371	397	319	365
26	500	374	448	475	385	440	396	331	371	401	333	368
27	459	398	439	477	390	438	422	325	386	400	330	364
28	455	390	436	457	195	345	421	347	391	880	311	474
29	465	399	446	358	237	297	413	357	388	526	396	437
30	485	406	444	390	320	364	408	342	386	420	348	394
31	473	406	453	---	---	---	419	342	390	382	144	264
MONTH	513	133	408	510	195	425	616	115	396	880	94	327

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	114	79	85	168	120	147	296	181	256	416	342	393
2	80	71	74	165	124	147	344	227	300	430	349	398
3	99	78	87	175	126	154	447	268	360	238	105	176
4	119	88	107	196	135	170	412	270	344	214	163	191
5	214	104	125	193	142	172	381	260	323	268	190	237
6	108	90	99	223	145	190	346	255	298	303	226	272
7	109	83	98	215	162	193	328	244	289	355	230	309
8	139	96	120	229	171	203	346	218	286	367	256	334
9	157	112	134	221	157	196	368	238	310	383	264	350
10	171	119	145	229	156	200	377	249	335	388	267	337
11	183	116	155	263	170	224	390	283	354	371	262	332
12	169	78	89	258	159	224	398	282	354	363	270	329
13	120	80	101	314	199	259	383	286	343	344	272	320
14	144	99	124	290	188	257	359	254	319	366	282	334
15	159	110	141	288	205	252	360	253	325	370	272	333
16	177	122	151	303	218	262	368	247	313	328	155	212
17	187	121	157	289	202	249	240	158	205	221	145	191
18	212	129	177	275	187	237	306	189	259	258	172	222
19	228	147	193	343	196	289	376	241	319	312	220	274
20	231	147	192	337	222	297	382	276	336	352	243	312
21	239	148	199	344	218	293	375	271	338	367	280	334
22	255	161	210	293	154	205	394	281	348	364	84	303
23	247	164	209	173	129	153	402	283	367	136	81	108
24	239	151	203	159	128	145	411	323	380	193	125	165
25	262	160	218	151	107	132	405	293	375	238	165	204
26	149	85	99	192	122	164	411	305	379	266	184	233
27	120	90	108	222	140	190	404	309	374	299	214	268
28	154	105	133	252	158	207	398	322	367	345	242	306
29	---	---	---	281	173	228	394	283	363	357	253	314
30	---	---	---	284	186	239	406	335	383	366	269	329
31	---	---	---	279	188	240	---	---	---	379	283	337
MONTH	262	71	140	344	107	210	447	158	330	430	81	282

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	379	260	331	426	194	320	343	197	289	264	188	230
2	362	285	327	399	304	360	387	303	355	320	204	267
3	369	289	340	425	342	392	400	333	375	378	276	334
4	385	305	356	428	370	395	415	350	388	374	292	344
5	371	304	334	---	---	---	411	356	391	406	300	360
6	403	332	363	---	---	---	422	365	396	413	330	377
7	382	314	345	---	---	---	411	364	390	411	329	381
8	360	279	330	---	---	---	391	298	359	427	350	395
9	412	317	375	---	---	---	391	335	371	420	333	396
10	446	349	409	---	---	---	395	351	376	443	343	397
11	450	360	415	---	---	---	395	351	377	401	349	371
12	455	300	388	---	---	---	400	350	382	399	304	344
13	411	295	365	---	---	---	416	377	399	414	331	369
14	418	335	393	---	---	---	406	366	391	429	337	376
15	427	348	392	---	---	---	409	366	395	405	322	358
16	398	339	375	---	---	---	420	130	355	398	312	363
17	417	317	388	---	---	---	297	104	231	423	326	372
18	449	362	412	---	---	---	120	48	76	415	330	368
19	389	283	361	---	---	---	131	79	103	407	336	373
20	442	353	405	---	---	---	193	107	151	393	332	361
21	457	378	424	---	---	---	170	138	156	361	287	338
22	461	376	426	---	---	---	207	132	174	352	305	337
23	471	391	439	---	---	---	269	183	234	366	280	333
24	509	413	474	---	---	---	292	170	252	372	310	344
25	572	477	531	---	---	---	209	71	121	368	308	342
26	566	481	532	---	---	---	116	77	94	372	306	342
27	527	458	496	---	---	---	163	107	137	356	276	335
28	504	439	478	---	---	---	200	141	174	379	330	358
29	498	232	409	345	317	327	257	119	219	377	335	360
30	440	269	371	382	302	354	307	213	262	360	318	346
31	---	---	---	399	323	374	252	177	219	---	---	---
MONTH	572	232	399	428	194	360	422	48	277	443	188	352
YEAR	880	48	324									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.0	17.0	18.0	23.0	21.0	22.5	14.5	11.0	13.0	17.0	13.5	15.0
2	20.5	17.5	19.5	23.0	21.0	22.0	14.5	10.5	12.5	17.0	14.5	15.5
3	20.5	17.0	19.5	21.5	18.5	20.0	12.5	9.5	11.5	14.0	9.5	11.5
4	21.5	18.5	20.5	19.5	17.0	18.5	13.0	10.5	12.0	11.5	8.5	10.5
5	22.5	19.5	21.0	20.5	17.0	19.0	13.0	9.0	11.0	8.5	7.0	8.0
6	23.0	20.5	21.5	20.0	17.5	19.0	11.0	8.5	9.5	8.0	6.0	7.0
7	22.0	20.0	21.5	18.0	15.0	17.0	10.5	7.0	9.0	8.0	6.0	7.0
8	22.5	20.5	22.0	18.0	13.5	16.5	10.5	7.0	9.0	8.5	6.0	7.0
9	23.0	20.0	22.0	17.5	13.5	16.5	11.0	7.5	9.5	8.0	5.5	7.0
10	23.0	21.0	22.0	18.0	14.0	16.5	12.0	9.0	10.5	8.0	5.5	6.5
11	22.5	20.5	22.0	17.5	16.0	17.0	13.0	11.0	12.0	8.5	5.5	7.0
12	22.5	19.5	21.5	17.0	13.5	15.5	13.0	11.5	12.5	8.0	5.0	6.5
13	22.0	18.5	20.5	16.0	13.0	15.0	14.0	11.5	13.0	8.5	4.0	6.5
14	21.5	17.5	20.0	16.5	13.0	15.5	14.5	12.5	14.0	8.5	3.5	6.5
15	21.5	17.5	20.0	17.0	12.0	15.5	15.0	14.0	14.5	7.0	3.5	6.0
16	22.0	19.0	21.0	18.0	14.0	16.5	15.5	13.5	14.5	9.0	4.0	7.5
17	22.5	20.5	22.0	17.0	13.0	15.5	17.5	14.5	16.0	8.5	5.0	7.5
18	23.0	20.5	22.0	16.0	12.0	14.0	18.0	13.5	16.0	9.0	5.0	7.5
19	24.0	21.0	22.5	16.0	13.0	14.5	18.5	14.5	16.5	11.0	6.5	8.0
20	24.0	21.5	23.0	15.0	11.5	14.0	18.0	15.0	17.0	7.5	3.5	6.0
21	23.5	22.0	22.5	14.5	10.5	13.0	18.0	15.5	17.0	6.0	2.0	4.5
22	23.5	21.5	22.5	13.5	10.0	12.0	17.5	15.5	16.5	8.0	4.0	6.5
23	23.5	22.0	23.0	13.0	8.5	11.0	15.5	12.5	14.0	8.5	4.5	7.0
24	24.0	22.0	23.0	13.0	8.5	11.0	14.0	9.5	12.0	9.0	5.0	7.5
25	24.0	22.0	23.0	13.5	8.5	11.5	14.5	12.0	13.0	10.5	5.5	8.0
26	23.0	21.5	22.5	14.0	9.5	12.5	13.5	9.5	12.0	9.0	5.5	7.5
27	23.5	20.5	22.0	16.0	10.5	14.0	14.5	11.0	13.0	9.0	5.0	7.0
28	23.5	22.0	23.0	17.0	12.0	15.0	15.5	11.0	13.5	9.0	6.0	7.0
29	24.0	22.5	23.5	14.0	10.0	12.5	16.0	12.0	14.0	9.5	4.5	7.5
30	23.5	22.5	23.0	14.5	10.5	13.0	17.0	12.0	15.0	9.5	6.0	8.5
31	23.5	22.0	23.0	---	---	---	16.0	13.5	14.5	9.0	5.5	7.0
MONTH	24.0	17.0	21.5	23.0	8.5	15.5	18.5	7.0	13.0	17.0	2.0	8.0

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC---Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	4.5	5.5	11.5	9.0	10.5	19.5	16.5	17.5	22.0	17.5	20.0
2	6.0	5.5	6.0	13.5	10.0	12.0	17.5	13.0	15.5	22.0	19.5	21.0
3	6.5	5.5	6.0	13.0	9.5	11.5	17.5	11.5	15.0	19.5	17.0	18.0
4	6.5	4.5	5.5	13.5	11.0	12.5	19.0	13.0	16.5	19.5	16.5	18.0
5	5.5	4.5	5.0	16.5	13.5	14.5	20.5	16.0	18.0	20.0	16.0	18.5
6	6.5	5.0	5.5	13.5	11.0	12.0	20.0	17.0	18.0	21.5	17.0	19.5
7	6.5	5.0	6.0	12.0	8.0	10.0	19.5	14.5	17.0	22.5	19.0	21.0
8	5.5	3.5	4.5	14.0	9.0	12.0	17.0	13.0	15.0	21.0	19.5	20.5
9	5.5	2.0	4.0	15.0	13.0	13.5	16.0	11.5	13.5	20.5	17.5	19.5
10	6.5	3.0	5.0	14.0	10.0	12.0	16.0	10.0	13.0	22.0	18.5	20.5
11	7.0	3.5	6.0	12.0	9.5	11.5	17.5	11.5	15.0	22.5	20.0	21.0
12	8.0	4.5	5.5	16.0	11.5	13.5	19.5	13.5	17.0	22.5	20.0	21.5
13	6.0	4.0	5.0	16.0	11.0	14.0	20.0	15.5	18.0	23.5	20.5	22.0
14	6.0	3.5	5.0	16.0	11.5	14.0	18.5	16.5	17.5	24.0	21.0	22.5
15	6.0	3.5	5.0	16.5	12.0	14.0	19.0	16.5	18.0	24.5	21.0	23.0
16	6.5	3.0	5.0	15.0	10.0	12.5	20.0	17.0	18.5	22.0	20.5	21.5
17	7.0	4.0	5.5	15.5	11.5	13.0	19.0	15.5	17.5	22.5	20.5	21.0
18	8.0	4.5	6.5	13.5	9.0	11.5	20.0	15.0	18.0	22.0	18.5	20.0
19	9.0	6.5	8.0	14.0	7.5	11.5	21.5	16.5	19.5	22.0	18.0	20.0
20	10.5	7.5	9.0	16.0	8.5	12.5	22.5	17.5	20.0	22.5	18.5	20.5
21	9.5	6.0	8.0	14.5	11.0	13.0	22.5	17.5	20.0	23.5	20.5	22.0
22	11.0	7.0	9.5	11.5	8.5	9.5	22.0	17.5	20.0	23.0	18.0	21.5
23	13.0	9.0	11.5	13.0	8.5	11.0	22.0	17.5	20.0	23.0	19.0	22.0
24	15.0	11.0	13.5	12.5	11.0	12.0	21.5	18.0	20.0	22.5	19.5	21.0
25	16.0	13.5	14.5	13.0	10.5	12.0	22.5	19.0	21.0	21.5	18.0	20.0
26	15.0	11.0	12.5	13.5	9.0	12.0	22.5	17.5	20.5	22.0	18.5	20.5
27	14.0	11.5	12.5	15.5	10.5	13.5	21.5	18.5	20.5	23.0	19.0	21.0
28	12.5	9.5	11.0	18.0	12.5	16.0	22.0	19.5	21.0	23.0	20.0	21.5
29	---	---	---	20.0	15.5	18.0	22.0	19.0	20.5	23.0	20.5	22.0
30	---	---	---	21.0	17.5	19.0	21.5	17.0	19.5	23.0	20.5	21.5
31	---	---	---	20.0	16.5	18.0	---	---	---	23.5	20.5	22.0
MONTH	16.0	2.0	7.5	21.0	7.5	13.0	22.5	10.0	18.0	24.5	16.0	21.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.0	21.5	23.0	23.0	21.5	22.0	27.0	23.0	25.0	25.0	22.5	24.0
2	24.5	22.0	23.0	24.0	21.0	23.0	26.0	23.0	24.5	25.0	22.5	24.0
3	25.0	22.0	23.5	25.5	22.0	23.5	26.0	21.5	23.5	26.5	23.5	25.0
4	25.0	22.0	24.0	25.5	22.5	23.5	25.5	21.5	23.5	27.5	24.0	25.5
5	26.0	23.0	24.5	---	---	---	26.0	21.5	23.5	27.5	24.0	26.0
6	25.0	23.0	24.0	---	---	---	25.5	22.5	24.0	28.0	24.5	26.5
7	24.0	23.0	23.5	---	---	---	27.0	23.0	25.0	28.0	24.5	26.5
8	24.5	21.5	23.0	---	---	---	26.5	24.0	25.0	28.0	25.0	26.5
9	25.0	22.0	24.0	---	---	---	26.5	23.5	25.5	28.0	24.5	26.5
10	25.5	23.0	24.5	---	---	---	27.5	24.0	25.5	28.0	24.5	26.5
11	26.0	23.5	25.0	---	---	---	28.0	23.5	26.0	27.0	24.5	26.0
12	25.0	23.5	24.5	---	---	---	28.0	24.5	26.0	24.5	22.5	23.5
13	24.0	21.0	22.5	---	---	---	28.5	25.0	27.0	23.5	21.0	22.5
14	23.5	19.0	21.5	---	---	---	29.0	24.5	27.0	23.0	18.5	21.0
15	24.0	20.0	22.0	---	---	---	29.0	25.0	27.0	22.5	18.5	20.5
16	24.0	22.0	23.0	---	---	---	29.0	24.5	27.0	22.5	18.0	21.0
17	25.0	21.5	23.5	---	---	---	26.5	24.0	25.0	23.5	18.5	21.5
18	25.5	23.0	24.0	---	---	---	25.5	23.0	24.5	23.5	19.0	21.5
19	25.0	23.0	24.0	---	---	---	25.5	24.0	25.0	23.5	20.0	22.5
20	25.0	22.0	23.5	---	---	---	26.0	24.0	25.0	24.0	21.0	23.0
21	25.0	21.5	23.0	---	---	---	25.5	23.5	24.5	24.5	21.0	23.0
22	25.0	22.0	23.5	---	---	---	26.0	24.0	25.0	24.0	22.0	23.0
23	25.0	22.5	24.0	---	---	---	24.5	23.0	24.0	24.0	21.5	23.0
24	26.0	22.5	24.5	---	---	---	24.0	22.0	23.0	25.0	22.0	24.0
25	26.5	24.0	25.0	---	---	---	24.0	22.0	23.0	24.0	22.5	23.5
26	26.5	24.0	25.0	---	---	---	24.0	23.0	23.5	24.0	21.5	23.0
27	25.5	22.0	24.0	---	---	---	25.0	23.5	24.0	24.0	21.0	23.0
28	25.0	21.5	23.5	---	---	---	25.0	23.5	24.5	23.0	19.5	21.5
29	25.0	22.0	23.0	25.0	23.0	24.0	25.5	23.0	24.5	22.5	19.0	21.0
30	23.5	22.0	22.5	26.5	23.0	25.0	26.0	24.0	25.0	22.5	18.0	21.0
31	---	---	---	27.5	23.5	26.0	25.0	23.0	24.0	---	---	---
MONTH	26.5	19.0	23.5	27.5	21.0	24.0	29.0	21.5	25.0	28.0	18.0	23.5
YEAR	29.0	2.0	17.5									

CAPE FEAR RIVER BASIN

02098198 HAW RIVER BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC

LOCATION.--Lat 35°39'11", long 79°04'03", Chatham County, Hydrologic Unit 03030002, on right bank 300 ft downstream from B. Everett Jordan Dam, 2.5 mi north of Moncure, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--1,689 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year. Published as Haw River near Haywood, NC (0209820) October 1965 to September 1978.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 155.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Oct. 1, 1978, water-stage recorder at site 0.3 mi downstream at same datum. Since June 22, 1966, auxiliary water-stage recorder 2.9 mi downstream.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Prior to 1972, some regulation for short periods at low flow caused by powerplants above station and Dec. 16, 1972 to Aug. 31, 1981 by temporary storings in B. Everett Jordan Lake (station 02098197). Satellite data transmitter at station.

AVERAGE DISCHARGE.--20 years, 1,651 ft³/s, adjusted for storage, 13.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,800 ft³/s Oct. 25, 1971, gage height, 22.41 ft at former site; no flow for part of Aug. 1, 1980, result of gate closure by the U.S. Army Corps of Engineers to facilitate construction of gaging station, and part of June 19, 1981 and Aug. 19, 1982, for maintenance work at dam and at gaging station; minimum daily discharge, 35 ft³/s Sept. 12, 1966, at former site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,400 ft³/s Feb. 7, gage height, 13.72 ft ; minimum daily discharge, 207 ft³/s July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597	591	553	415	e920	4800	612	397	422	631	325	2330
2	576	584	555	415	e410	3860	226	400	423	335	1210	1330
3	468	582	443	464	e410	2280	274	400	514	217	2870	943
4	332	582	370	e400	e1660	1710	438	392	585	322	3010	762
5	329	582	374	2480	4880	1490	438	462	591	385	1460	445
6	336	582	380	6060	6930	1310	438	427	591	510	248	438
7	483	582	383	6320	11800	1300	438	412	591	591	370	415
8	591	582	363	6170	14000	1300	438	408	580	591	426	e458
9	591	582	371	6090	13300	1300	438	408	669	630	462	e490
10	591	582	363	5650	12900	1010	438	408	482	510	462	e490
11	591	582	363	3430	12600	850	438	411	265	555	462	e490
12	591	582	363	1760	8260	626	438	419	311	630	414	e490
13	591	582	363	1390	4490	454	438	415	392	660	385	e490
14	591	582	363	1250	7620	454	438	415	400	650	372	e490
15	591	582	363	1060	11400	454	438	415	400	650	370	e490
16	591	562	363	808	7540	454	438	415	402	650	417	e490
17	591	542	363	549	3040	454	470	415	415	546	519	e490
18	591	546	363	378	2430	423	440	415	417	502	e443	e490
19	591	546	348	378	1220	423	423	415	415	502	e400	e503
20	591	544	336	378	415	418	423	415	415	547	e402	e520
21	591	537	363	372	409	415	415	415	415	564	e403	e520
22	591	537	415	370	1380	415	415	608	415	564	e3060	e520
23	591	537	415	414	2030	415	415	980	415	566	5770	e520
24	591	537	415	385	2020	411	415	1520	541	573	5410	e520
25	591	541	415	385	2000	1770	415	2500	610	324	5420	e520
26	591	546	415	385	2010	2500	413	2470	610	207	5630	e520
27	591	546	415	385	2020	1400	408	2440	610	255	5420	e520
28	591	546	415	385	3510	880	408	2270	610	228	5220	e520
29	591	546	415	385	---	880	405	1170	639	227	5070	e520
30	591	546	415	642	---	880	393	437	632	218	3490	e540
31	591	---	415	1550	---	874	---	415	---	220	2420	---
TOTAL	17305	16900	12256	51503	141604	36210	12664	23489	14777	14560	62340	18264
MEAN	558	563	395	1661	5057	1168	422	758	493	470	2011	609
MAX	597	591	555	6320	14000	4800	612	2500	669	660	5770	2330
MIN	329	537	336	370	409	411	226	392	265	207	248	415
(†)	-84	-250	+432	+335	+130	-211	-23	-22	-226	+403	0	-417

CAL YR 1984	TOTAL	930958	MEAN	2544	MAX	14000	MIN	197	MEAN‡	2500	CFSM‡ 1.48	IN.‡ 20.15
WTR YR 1985	TOTAL	421872	MEAN	1156	MAX	14000	MIN	207	MEAN‡	1163	CFSM‡ 0.69	IN.‡ 9.37

e Estimated
† Change in contents, equivalent in cubic feet per second, in B. Everett Jordan Reservoir; furnished by U. S. Army Corps of Engineers.
‡ Adjusted for change in contents.

02098198 HAW RIVER BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-75, 1980 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1973 to September 1975, April 1980 to September 1984.
WATER TEMPERATURE: July 1973 to September 1975, April 1980 to September 1984.

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1984.

REMARKS.--Station operated to define the chemical-quality characteristics of outflow from the B. Everett Jordan Lake. For water years 1973-75, data were published as Haw River near Haywood (station 02098200).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1973-75, 1980-84): Maximum daily, 572 microsiemens Nov. 11, 1973; minimum, 23 microsiemens July 29, 1982.
WATER TEMPERATURE (water years 1973-75, 1980-84): Maximum daily, 33.0°C Aug. 8, 1980; minimum daily, 1.0°C Dec. 27, 29, 1980, Jan. 5, 6, 13-18, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT											
31...	1030	61	128	6.4	22.0	20	767	7.4	84	28	0
NOV											
14...	1430	76	175	6.8	17.0	22	766	9.3	96	32	0
DEC											
17...	1430	56	140	5.7	6.0	140	762	12.3	99	31	0
JAN											
30...	1300	385	125	6.6	4.0	40	755	13.2	102	31	2
FEB											
26...	1145	572	109	6.7	7.5	60	764	13.7	114	27	2
MAR											
28...	0845	3080	165	6.3	11.0	30	755	9.8	90	34	0
APR											
30...	1300	393	154	8.5	22.0	20	762	9.8	112	32	0
MAY											
15...	1220	165	184	7.0	23.5	30	768	9.2	108	33	0
JUN											
10...	1045	274	153	7.2	24.5	45	765	8.1	97	29	0
JUL											
29...	1330	222	175	6.3	24.0	65	760	6.5	78	35	0
AUG											
28...	1015	5250	105	6.4	24.5	150	765	7.1	85	25	0
SEP											
24...	1400	520	135	7.2	25.0	20	767	8.5	102	29	0

02098198 HAW RIVER BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 31...	6.7	2.7	13	47	1	2.7	13	10	.20	7.2
NOV 14...	7.7	3.1	21	56	2	3.6	20	14	.20	8.3
DEC 17...	7.5	3.0	12	42	1	3.5	15	9.9	.10	11
JAN 30...	7.4	3.0	14	47	1	2.7	16	11	.20	13
FEB 26...	6.4	2.6	9.3	41	.8	2.2	14	8.4	.20	11
MAR 28...	8.3	3.3	17	50	1	2.3	18	10	.20	10
APR 30...	7.4	3.2	16	50	1	2.8	20	12	.20	5.8
MAY 15...	7.8	3.2	20	54	2	2.9	25	13	.20	5.6
JUN 10...	7.0	2.9	17	52	1	3.2	21	10	.20	6.8
JUL 29...	8.5	3.3	22	55	2	3.6	22	13	.30	8.1
AUG 28...	5.9	2.4	8.7	40	.8	3.0	8.6	7.6	.20	7.6
SEP 24...	6.8	2.8	13	46	1	3.2	14	9.7	.20	6.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
OCT 31...	85	75	.12	14	.28	.020	.30	--	.370	--
NOV 14...	113	110	.15	23	.78	.020	.80	--	.300	--
DEC 17...	87	81	.12	13	.68	.020	.70	.70	.390	.200
JAN 30...	88	85	.12	91	.88	.020	.90	--	.220	--
FEB 26...	76	69	.10	117	.57	.030	.60	.58	.180	.120
MAR 28...	85	92	.12	707	.67	.030	.70	--	.140	--
APR 30...	98	90	.13	104	.18	.020	.20	--	.100	--
MAY 15...	118	100	.16	53	.10	.100	.20	--	.100	--
JUN 10...	104	90	.14	77	.57	.030	.60	--	.240	--
JUL 29...	113	100	.15	68	.45	.150	.60	--	.510	--
AUG 28...	81	62	.11	1150	.28	.020	.30	.30	.200	.200
SEP 24...	85	82	.12	119	--	<.010	.20	--	.040	--

02098198 HAW RIVER BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	NITRO-GEN DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT 31...	--	.33	--	.70	--	--	1.0	4.4	--	.290
NOV 14...	--	.20	--	.50	--	--	1.3	5.8	--	.270
DEC 17...	.26	.51	--	.90	--	--	1.6	7.1	--	.250
JAN 30...	--	.08	--	.30	--	--	1.2	5.3	--	.280
FEB 26...	.15	1.2	--	1.4	--	--	2.0	8.9	--	.600
MAR 28...	--	.66	--	.80	--	--	1.5	6.6	--	.220
APR 30...	--	.90	--	1.0	--	--	1.2	5.3	--	--
MAY 15...	--	.40	--	.50	--	--	.70	3.1	--	.140
JUN 10...	--	.76	--	1.0	--	--	1.6	7.1	--	.130
JUL 29...	--	.59	--	1.1	--	--	1.7	7.5	--	.290
AUG 28...	.26	.70	.50	.90	.20	.70	1.2	5.3	1.0	.160
SEP 24...	--	.76	--	.80	--	--	1.0	4.4	--	.100

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT 31...	--	.050	--	--	1	1	10	4	2000	4
NOV 14...	--	.170	--	--	1	<1	10	3	1600	2
DEC 17...	.170	.220	.160	.49	<1	<1	<10	5	1400	1
JAN 30...	--	.200	--	--	<1	<1	10	--	--	1
FEB 26...	.140	.140	.110	.34	<1	<1	10	4	1200	4
MAR 28...	--	.150	--	--	1	1	10	7	790	1
APR 30...	--	.080	--	--	<1	<1	10	3	230	<1
MAY 15...	--	.100	--	--	<1	1	10	6	280	4
JUN 10...	--	.110	--	--	<1	<1	10	3	690	2
JUL 29...	--	.230	--	--	2	1	10	4	2600	9
AUG 28...	.070	.080	.050	.15	<1	<1	<10	4	1500	4
SEP 24...	--	.080	--	--	<1	2	10	4	1100	9

02098198 HAW RIVER BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 31...	580	<.1	<1	20	6.6	--	30	4.9
NOV 14...	180	<.1	<1	10	6.5	--	26	5.3
DEC 17...	60	.4	<1	20	6.7	--	16	2.4
JAN 30...	--	.1	<1	10	5.7	--	6	6.2
FEB 26...	70	.1	<1	10	5.7	.04	13	20
MAR 28...	110	.3	<1	20	5.2	--	16	133
APR 30...	30	.3	<1	20	6.6	--	3	3.2
MAY 15...	80	1.4	<1	10	6.6	--	11	4.9
JUN 10...	160	<.1	<1	50	9.5	--	37	27
JUL 29...	1300	.1	<1	100	10	--	20	12
AUG 28...	410	<.1	<1	10	--	.06	27	383
SEP 24...	150	<.1	<1	40	8.5	--	45	63

02098198 HAW R BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/30	0900	WATER	0	3.99	591	105	6.90	20.0		7.5	10K
84/11/26	0920	WATER	0	3.94	546	130	7.20	6.0	9.3	12.0	160
84/12/14	0910	WATER	0	3.71	363	78	7.60	7.0		12.6	80
85/01/11	0830	WATER	0	7.54	4700	70		8.0		11.0	
85/02/20	0840	WATER	0	3.78	415	61	7.10	5.0	60.0	12.8	60
85/03/26	0800	WATER	0	5.97	2940	105	7.00	12.0		11.0	30
85/04/23	0840	WATER	0	3.48	251	112	7.10	22.0		9.0	20
85/05/17	0900	WATER	0	3.78	415	153	7.30	21.0	4.5	8.4	10K
85/06/13	0840	WATER	0	3.71	395	150	7.10	23.0		8.4	10K
85/07/30	0850	WATER	0	3.46	217	140	6.80	25.0		7.4	350
85/08/20	0830	WATER	0.1	3.76	400	85	6.90	24.0	70.0	7.0	990
85/09/23	0855	WATER	0.1	3.92	528	112	7.20	23.0		9.2	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	0900	WATER	0	35	23	120	.32	.210	.600	.150	.030
84/11/26	0920	WATER	0	56	12	200	1.00	.050	.500	.300	.230
84/12/14	0910	WATER	0	36	19	150	.68	.150	.600	.280	.170
85/01/11	0830	WATER	0		14	130					
85/02/20	0840	WATER	0	110	21	140	.56	.130	.500	.180	.080
85/03/26	0800	WATER	0	44	12	150					
85/04/23	0840	WATER	0		11	120					
85/05/17	0900	WATER	0	41	10	150	.29	.160	.700	.170	.070
85/06/13	0840	WATER	0	35	17	130					
85/07/30	0850	WATER	0	37	45	170					
85/08/20	0830	WATER	0.1	22	55	170	.50	.210	.700	.220	.090
85/09/23	0855	WATER	0.1	35	7	130					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/26	0920	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/20	0840	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/17	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/20	0830	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

02099000 EAST FORK DEEP RIVER NEAR HIGH POINT, NC

LOCATION.--Lat 36°02'15", long 79°56'46", Guilford County, Hydrologic Unit 03030003, on left bank 5 ft upstream from bridge on Secondary Road 1541, 3.3 mi upstream from High Point Dam, and 5.2 mi northeast of High Point College, High Point.

DRAINAGE AREA.--14.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORDS.--WSP 1723: 1929(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.02 ft above National Geodetic Vertical Datum of 1929. Intake pipe extended to downstream side of bridge since Mar. 1, 1934.

REMARKS.--No estimated daily discharges. Records good except those above 200 ft^3/sec, which are fair. Slight diurnal fluctuation at low flow during growing season.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--57 years, 16.6 ft^3/s, 15.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,300 ft^3/s Sept. 24, 1947, gage height, 10.87 ft, from floodmark, from rating curve extended above 1,600 ft^3/s on basis of contracted-opening measurement of peak flow; minimum, 0.6 ft^3/s Jan. 17, 1981 (result of temporary regulation); minimum unregulated, 1.0 ft^3/s Aug. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 22	2215	*885	*4.27	No other peak greater than base discharge.			

Minimum discharge, 2.9 ft^3/s Jan. 27, result of freezeup; minimum daily, 3.4 ft^3/s Sept. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	7.6	7.4	6.8	211	15	7.7	5.3	5.7	5.0	6.1	5.8
2	9.1	7.2	7.6	15	218	13	7.1	7.1	5.5	5.0	5.8	5.7
3	7.3	6.7	25	152	39	12	7.2	14	5.4	4.5	4.8	5.2
4	6.3	11	9.6	132	22	11	7.2	6.3	5.2	9.0	4.8	4.7
5	6.0	9.5	63	36	31	11	7.1	5.8	29	8.0	4.6	4.6
6	5.9	7.4	34	19	51	9.3	8.1	5.6	35	5.6	4.5	4.4
7	6.0	6.9	13	16	30	9.0	7.4	5.4	24	6.8	5.2	4.4
8	6.1	6.8	11	12	19	9.0	7.1	5.2	22	4.6	5.2	4.1
9	6.0	6.8	8.9	10	15	9.1	6.9	5.2	9.2	4.2	7.6	4.0
10	5.7	7.0	8.4	9.5	13	8.8	6.8	5.0	7.1	4.3	5.4	4.2
11	5.6	11	7.7	9.2	12	8.6	7.4	5.8	7.0	6.3	4.6	4.1
12	5.5	7.8	7.4	8.3	91	8.5	7.5	6.1	21	4.5	4.4	4.0
13	5.5	6.9	7.1	8.0	26	8.0	7.0	5.3	12	4.6	4.1	4.2
14	5.6	6.8	7.1	8.0	18	8.0	7.0	5.0	7.7	4.8	3.9	4.1
15	5.6	6.6	6.8	7.5	15	7.9	7.3	9.3	6.1	4.7	3.7	4.2
16	5.5	6.7	6.8	7.2	12	7.7	13	66	6.6	6.1	3.7	4.2
17	5.5	6.7	6.8	9.1	12	7.8	8.6	35	6.3	4.4	14	3.9
18	5.8	7.0	6.9	8.9	11	7.6	7.0	9.9	5.3	3.8	56	3.7
19	5.6	16	7.0	8.1	11	7.4	6.7	7.1	5.0	3.6	12	3.7
20	5.6	9.5	6.9	7.1	11	7.4	6.2	6.2	4.8	3.7	7.8	3.6
21	5.6	7.6	7.1	6.5	9.7	7.4	5.9	5.9	4.7	3.5	12	3.7
22	8.5	7.4	9.0	6.6	9.4	15	5.6	144	4.7	4.2	6.5	4.1
23	6.8	7.4	7.5	6.8	9.4	16	5.6	86	4.7	5.0	5.2	3.9
24	6.3	7.4	7.1	7.0	9.4	11	6.7	22	4.7	6.4	12	3.7
25	6.3	7.1	7.1	7.2	11	9.4	7.7	13	4.5	90	12	3.5
26	6.4	7.1	6.8	6.6	78	8.5	6.0	9.1	4.3	16	35	3.5
27	7.2	7.0	6.8	6.4	24	8.1	5.8	7.5	4.1	8.8	41	3.4
28	7.6	32	6.8	7.3	17	8.0	5.8	6.7	4.1	22	26	3.4
29	12	13	6.8	8.1	---	7.9	5.6	6.5	4.4	8.3	10	3.5
30	15	9.3	7.0	8.3	---	7.8	5.3	6.6	4.9	7.3	7.1	3.5
31	8.0	---	6.8	51	---	7.7	---	6.3	---	6.8	6.2	---
TOTAL	226.9	267.2	337.2	611.5	1035.9	292.9	210.3	535.0	275.0	281.8	341.2	123.0
MEAN	7.32	8.91	10.9	19.7	37.0	9.45	7.01	17.3	9.17	9.09	11.0	4.10
MAX	23	32	63	152	218	16	13	144	35	90	56	5.8
MIN	5.5	6.6	6.8	6.4	9.4	7.4	5.3	5.0	4.1	3.5	3.7	3.4
CFSM	.49	.60	.74	1.33	2.50	.64	.47	1.17	.62	.61	.74	.28
IN.	.57	.67	.85	1.54	2.60	.74	.53	1.34	.69	.71	.86	.31

CAL YR 1984	TOTAL	8225.0	MEAN	22.5	MAX	369	MIN	5.4	CFSM	1.52	IN.	20.67
WTR YR 1985	TOTAL	4537.9	MEAN	12.4	MAX	218	MIN	3.4	CFSM	.84	IN.	11.41

02099000 EAST FORK DEEP RIVER NEAR HIGH POINT, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/14	0845	WATER	0	.51	7	89	7.10	2.0	6.6	12.8	540
85/02/11	0850	WATER	0	.60	11	91	7.50	2.0		12.6	180
85/03/28	0850	WATER	0	.52	8	113	6.90	12.0		10.5	190
85/04/09	0900	WATER	0	.48	7	107	7.20	8.0	3.4	11.2	20
85/05/23	0905	WATER	0	1.23	69	78	6.90	19.0		8.0	7200
85/06/18	0840	WATER	0	.42	5	126	7.30	22.0		7.4	900
85/07/17	1030	WATER	0	.39	5	134	7.30	23.0	11.0	7.0	320
85/08/21	0830	WATER	0.1	.73	18	106	7.10	22.0		7.6	21000
85/09/12	0930	WATER	0.1	.36	4	132	7.50	20.0		7.0	710

02099000

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/14	0845	WATER	0	42	1	90	.45	.040	.200	.050	.020
85/02/11	0850	WATER	0	41	10	94					
85/03/28	0850	WATER	0	47	5	110					
85/04/09	0900	WATER	0	50	4	110	.13	.010	.200	.030	.010
85/05/23	0905	WATER	0	21	170	270					
85/06/18	0840	WATER	0	50	14	140					
85/07/17	1030	WATER	0	56	10	120	.37	.150	.400	.090	.050
85/08/21	0830	WATER	0.1	31	91	190					
85/09/12	0930	WATER	0.1	51	14	120					

02099000

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/14	0845	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/09	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/17	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

02099500 DEEP RIVER NEAR RANDLEMAN, NC

LOCATION.--Lat 35°54'06", long 79°51'05", Randolph County, Hydrologic Unit 03030003, on left bank 500 ft downstream from bridge on Secondary Road 1929, 0.2 mi downstream from occasionally active Coltrane's Mill, 0.5 mi south of Guilford County line, 4.8 mi upstream from Muddy Creek, and 7 mi north of Randleman.

DRAINAGE AREA.--125 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 782: 1929-30. WSP 1383: 1934-35, 1941. WSP 1723: 1929(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 638.11 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Large diurnal fluctuation at times at low flow caused by Coltrane's mill. Some regulation by Oak Hollow Reservoir and High Point Lake (stations 02098495, 02099096). City of High Point diverted an average of 18.9 ft³/s for municipal water supply during water year; 12.1 ft³/s was discharged as sewage effluent into Richland Creek above station and 4.8 ft³/s into Rich Fork Creek in Pee Dee River basin.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--57 years, 126 ft³/s, 13.69 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s Sept. 25, 1947, gage height, 32.2 ft, from floodmark, from rating curve extended above 7,100 ft³/s on basis of contracted-opening measurement of peak flow at bridge 1.5 mi upstream; minimum, 0.5 ft³/s Nov. 28, 1931, gage height, 1.41 ft; minimum daily, 1.2 ft³/s Nov. 12, 1933.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0500	*3,280	*14.97	Feb. 2	0530	2,960	14.02

Minimum discharge, 5.2 ft³/s Oct. 27, gage height, 1.65 ft; minimum daily 11 ft³/s July 21, Aug. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	25	46	37	1920	157	33	17	22	25	69	41
2	42	25	44	41	1810	146	32	18	27	18	45	38
3	34	22	141	608	421	131	31	74	16	22	38	35
4	19	23	60	1040	255	125	19	37	15	32	23	18
5	19	42	185	555	285	123	28	17	32	95	15	25
6	19	35	219	255	390	112	30	18	256	23	31	24
7	17	20	102	210	317	103	31	22	275	14	19	22
8	18	25	85	196	215	105	23	22	211	33	27	20
9	21	23	78	186	183	100	28	21	65	17	26	20
10	21	21	79	180	166	96	19	23	42	12	16	22
11	20	39	95	177	160	92	32	34	36	23	12	21
12	19	32	129	171	647	90	20	18	27	20	29	21
13	19	28	114	168	303	81	32	13	50	28	18	20
14	18	25	45	140	210	75	18	22	39	36	11	17
15	18	24	41	79	183	70	34	23	24	41	15	16
16	20	23	41	75	164	66	35	132	23	117	23	15
17	21	22	41	84	153	68	34	192	34	38	46	18
18	21	24	38	88	152	64	22	55	23	36	478	18
19	21	38	37	80	157	56	23	36	23	18	175	17
20	20	52	22	75	149	56	33	18	32	17	68	18
21	19	42	38	71	146	55	26	30	16	11	335	18
22	48	44	34	72	139	135	18	18	14	15	232	17
23	50	41	35	75	135	170	22	679	16	34	82	16
24	32	41	37	78	133	101	35	117	12	22	86	19
25	26	41	37	78	134	85	30	66	17	489	280	16
26	35	67	18	73	527	68	39	44	49	206	337	17
27	17	123	27	70	200	50	22	37	20	97	203	16
28	12	217	39	88	183	42	29	22	17	132	290	16
29	22	161	37	126	---	38	19	38	38	86	123	15
30	28	106	21	128	---	35	32	26	71	59	71	14
31	29	---	25	345	---	34	---	25	---	173	49	---
TOTAL	877	1451	1990	5649	9837	2729	828	1914	1542	2069	3352	610
MEAN	28.3	48.4	64.2	182	351	88.0	27.6	61.7	51.4	66.7	108	20.3
MAX	152	217	219	1040	1920	170	39	679	275	489	478	41
MIN	12	20	18	37	133	34	18	13	12	11	11	14

CAL YR 1984 TOTAL 63719 MEAN 174 MAX 2500 MIN 11
WTR YR 1985 TOTAL 32848 MEAN 90.0 MAX 1920 MIN 11

02099500 DEEP RIVER NEAR RANDLEMAN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/29	0950	WATER	0	1.95	18	467	7.30	21.0	2.0	6.8	170
84/11/26	1105	WATER	0	2.23	39	204	7.40	7.0		10.6	230
84/12/13	0930	WATER	0	2.97	133	177	7.30	7.0		10.9	450
85/01/14	1000	WATER	0	3.10	157	115	7.30	4.0	9.5	12.0	50
85/02/11	0935	WATER	0	3.07	151	125	7.30	3.0		12.2	40
85/03/28	0950	WATER	0	2.31	41	234	7.30	15.0		9.0	20
85/04/09	1010	WATER	0	2.32	42	347	7.20	13.0	6.1	6.6	180
85/05/23	1030	WATER	0	5.53	675	109	7.40	21.0		8.2	4500
85/06/18	0945	WATER	0	2.23	39	519	7.60	24.0		5.8	230
85/07/17	1130	WATER	0	2.18	34	242	7.40	25.0	110.0	6.8	810
85/08/21	1000	WATER	0.1	5.03	562	199	7.10	23.0		7.9	5600
85/09/12	1020	WATER	0.1	2.02	22	437	7.50	23.0		6.3	120

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	0950	WATER	0	93	3	300	.58	6.500	9.900	3.200	2.800
84/11/26	1105	WATER	0	94	3	160	.54	4.200	5.200	1.400	1.300
84/12/13	0930	WATER	0	48	12	150	.23	.160	3.800	.800	.680
85/01/14	1000	WATER	0	38	10	100	.26	.900	1.100	.290	.210
85/02/11	0935	WATER	0	25	10	120	.38	1.200	3.900	.200	.130
85/03/28	0950	WATER	0	52	9	180	.42	2.200	3.500	.930	.740
85/04/09	1010	WATER	0	90	12	250	.30	6.700	8.700	2.400	1.900
85/05/23	1030	WATER	0	32	130	260	.20	.310	1.300	.590	.070
85/06/18	0945	WATER	0	95	10	340	1.40	5.700	8.000	3.100	2.500
85/07/17	1130	WATER	0	46	68	250	1.20	.850	1.400	1.100	.840
85/08/21	1000	WATER	0.1	37	260	430	1.10	1.100	3.500	.780	.540
85/09/12	1020	WATER	0.1	80	11	300	4.20	2.700	4.400	3.100	2.400

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/29	0950	WATER	0	10K	20K	50K	20K	100K	.2K	300	40
85/01/14	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/09	1010	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/17	1130	WATER	0	10K	20K	50K	30	100K	.2K	100K	40

K Less than noted value.

02100500 DEEP RIVER AT RAMSEUR, NC

LOCATION.--Lat 34°43'34", long 79°39'20", Randolph County, Hydrologic Unit 03030003, on right bank 0.2 mi downstream from Main Street bridge in Ramseur, 0.5 mi downstream from mill dam, and 1.5 mi downstream from Sandy Creek.

DRAINAGE AREA.--349 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1922 to current year.

REVISED RECORDS.--WSP 1032: 1923-24, 1925(M), 1926, 1927-28(M), 1929, 1930(M), 1932-33, 1934(M), 1935, 1936-37(M), 1944(M). WSP 1383: 1923(m), 1925, 1927, 1930, 1936. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 419.50 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Flow slightly regulated by Oak Hollow Reservoir, High Point Municipal Lake, (stations 02098495, 02099096) and small powerplant reservoirs. Prior to January 1963 large diurnal fluctuation caused by powerplant immediately above station. Town of Asheboro diverted an average of 6.2 ft³/s for water supply from Pee Dee River basin and discharged an average of 5.4 ft³/s of sewage effluent into the Deep River above the station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--62 years (1923-85), 355 ft³/s, 13.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,000 ft³/s Sept. 18, 1945, gage height, 34.04 ft, from floodmark, from rating curve extended above 18,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 0.4 ft³/s May 27, Nov. 28, 29, 1941; minimum daily, 0.7 ft³/s Nov. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1901 reached a stage of 28.75 ft, from floodmarks, 0.2 mi upstream, discharge, 30,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0730	*12,100	*18.06	Feb. 2	0800	8,320	13.67

Minimum discharge, 23 ft³/s Oct. 15, July 12; minimum gage height, 0.67 ft, July 12; minimum daily, 25 ft³/s Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	60	222	87	8050	436	176	98	78	110	377	129
2	108	56	69	64	6480	387	175	93	79	147	197	121
3	107	58	437	1430	1750	284	110	382	75	80	130	117
4	77	54	374	3080	798	343	152	348	68	75	87	98
5	72	50	294	1880	682	165	127	138	52	67	64	78
6	73	53	875	688	1350	261	144	98	206	72	62	84
7	74	55	352	426	1260	322	114	111	787	87	66	77
8	73	57	191	361	644	209	99	99	678	89	52	76
9	74	59	115	303	462	212	108	79	274	81	64	55
10	75	62	237	276	397	224	139	78	195	60	78	37
11	70	56	230	272	416	253	121	80	134	39	88	53
12	59	52	58	255	2400	187	128	68	108	26	91	66
13	44	53	147	217	1100	229	149	60	82	51	84	62
14	33	62	108	270	606	180	111	76	101	269	63	49
15	25	78	127	214	471	180	104	84	100	144	44	36
16	32	69	108	192	399	176	124	95	87	120	57	33
17	39	61	101	132	324	135	150	361	81	116	64	45
18	39	49	57	140	377	194	142	308	161	99	2140	55
19	46	47	51	251	262	182	121	144	187	87	757	44
20	46	50	156	60	376	171	128	110	93	86	317	32
21	45	49	56	160	241	170	122	98	70	68	814	30
22	45	66	52	185	334	289	119	104	92	45	915	42
23	54	71	59	181	243	665	115	644	79	44	304	41
24	59	67	133	173	261	452	99	365	51	41	305	50
25	63	67	202	188	353	419	72	225	35	1460	2090	47
26	65	76	57	270	1940	282	54	124	41	1280	944	42
27	58	110	52	88	1010	272	44	113	33	363	761	40
28	62	217	71	96	540	199	66	107	57	215	673	34
29	67	439	63	124	---	195	91	93	57	187	382	34
30	68	223	56	222	---	189	102	71	58	164	269	33
31	60	---	54	384	---	118	---	54	---	187	137	---
TOTAL	1852	2526	5244	12669	33606	7980	3506	4908	4199	5959	12476	1740
MEAN	59.7	84.2	169	409	1200	257	117	158	140	192	402	58.0
MAX	108	439	875	3080	8050	665	176	644	787	1460	2140	129
MIN	25	47	51	60	241	118	44	54	33	26	44	30
CFSM	.17	.24	.48	1.17	3.44	.74	.34	.45	.40	.55	1.15	.17
IN.	.20	.27	.56	1.35	3.58	.85	.37	.52	.45	.64	1.33	.19

CAL YR 1984 TOTAL 187432 MEAN 512 MAX 9780 MIN 25 CFSM 1.47 IN. 19.98
WTR YR 1985 TOTAL 96665 MEAN 265 MAX 8050 MIN 25 CFSM .76 IN. 10.30

02100500 DEEP RIVER AT RAMSEUR, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/29	1130	WATER	0	1.05	66	356	7.00	21.0	1.5	5.2	20
84/11/26	1000	WATER	0	.99	54	328	7.20	6.0		10.6	80
84/12/13	1240	WATER	0	1.51	178	136	7.50	7.0		11.4	40
85/01/14	1210	WATER	0	1.95	331	128	7.30	4.0	20.0	12.2	380
85/02/11	1250	WATER	0	2.08	406	114	7.40	4.0		12.4	610
85/03/28	1050	WATER	0	1.50	200	131	7.80	15.0		11.0	20
85/04/09	1120	WATER	0	1.13	101	162	7.70	15.0	5.0	10.6	20
85/05/23	1140	WATER	0	3.93	1500	212	7.40	22.0		7.5	810
85/06/18	1100	WATER	0	1.39	168	182	7.40	25.0		6.1	140
85/07/17	1315	WATER	0	1.19	116	308	7.60	28.0	14.0	6.7	60
85/08/21	1100	WATER	0.1	1.72	245	97	7.50	24.0		7.3	230
85/09/12	1115	WATER	0.1	.96	66	261	7.30	25.0		5.4	130

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	1130	WATER	0	56	5	260	2.70	.110	.700	1.200	1.100
84/11/26	1000	WATER	0	50	1	43	4.00	.460	1.800	1.100	1.100
84/12/13	1240	WATER	0	33	12	150					
85/01/14	1210	WATER	0	33	17	120	.86	.710	1.000	.370	.240
85/02/11	1250	WATER	0	30	18	140	.70	.120	2.000	.340	.230
85/03/28	1050	WATER	0	30	11	120	1.20	.530	.900	.380	.270
85/04/09	1120	WATER	0	35	11	140	1.10	.020	.400	.430	.310
85/05/23	1140	WATER	0	45	160	330	1.80	.100	.900	1.100	.580
85/06/18	1100	WATER	0	32	27	190	2.50	.160	.700	.560	.420
85/07/17	1315	WATER	0	41	7	230	2.40	.100	.700	.850	.730
85/08/21	1100	WATER	0.1	24		150	.84	.080	.700	.310	.210
85/09/12	1115	WATER	0.1	40	8	200	1.50	.150	.500	.400	.330

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/29	1130	WATER	0	11	20K	50K	30	100K	.2K	100K	30
85/01/14	1210	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/09	1120	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/17	1315	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20

K Less than noted value.

CAPE FEAR RIVER BASIN

0210108450 SUCK CREEK TRIBUTARY NEAR ZION GROVE, NC

LOCATION.--Lat 35°20'17", long 79°33'57", Moore County, Hydrologic Unit 03030003, on right bank 30 ft upstream from mouth and 2.0 mi east of Zion Grove.

DRAINAGE AREA.--0.67 mi^2.

PERIOD OF RECORD.--September 1983 to current year.

REMARKS.--Station operated as partial-record site in the National Acid Precipitation Assessment Program for defining effects of atmospheric deposition on surface-water chemistry (station 0213220795).

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	*STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)
OCT , 1984 29...	1000	.04	22	6.3	20.0	5	0	--
DEC 17...	1130	.05	19	6.0	14.0	5	4	--
FEB , 1985 19...	1030	.94	17	5.8	6.5	4	--	--
APR 22...	1045	.09	19	6.2	21.0	4	--	--
22...	1100	.09	19	6.2	20.0	4	--	--
JUL 01...	1030	.18	18	5.7	19.5	5	--	--
SEP 03...	1100	1.3	13	5.5	22.0	3	--	3.5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM DIS-SOLVED (UG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT , 1984 29...	.96	.65	1.9	1100	6.0	2.1	2.1	.03	12
DEC 17...	.80	.70	1.6	560	1.0	3.2	2.2	.04	9.0
FEB , 1985 19...	.60	.60	1.4	520	<1.0	3.1	1.7	.02	6.0
APR 22...	.55	.65	2.1	750	--	2.8	2.1	.03	--
22...	.51	.60	1.8	710	--	2.9	2.1	.04	--
JUL 01...	.61	.75	2.0	770	--	3.8	2.0	.04	--
SEP 03...	.51	.44	1.1	580	<.500	1.8	1.7	.04	7.2

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN NITRATE DISSOLV (UG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT , 1984 29...	28	<10.0	<.005	<.002	60	20	310	2.3
DEC 17...	19	<10.0	<.005	<.002	20	11	23	2.5
FEB , 1985 19...	--	<10.0	.024	<.001	60	15	31	2.0
APR 22...	--	<10.0	.002	<.010	--	--	--	2.2
22...	--	<10.0	.009	<.010	--	--	--	2.5
JUL 01...	--	10.0	.021	<.010	--	--	--	2.7
SEP 03...	--	<10.0	.010	<.001	140	51	130	5.1

*Streamflow figures are actual discharge measurements.

02102000 DEEP RIVER AT MONCURE, NC

LOCATION.--Lat 35°37'38", long 79°06'58", Lee County, Hydrologic Unit 03030003, on right bank 1.0 mi upstream from Lockville Dam, 1.2 mi upstream from bridge on U.S. Highway 1, 1.5 mi northwest of Moncure, 2.2 mi downstream from Rocky River, and 4.5 mi upstream from confluence with Haw River.

DRAINAGE AREA.--1,434 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1930 to current year. Records for May 1898 to December 1899 published in 21st Annual Report, Part 4, and in Bulletins 34 and 39 of North Carolina Department of Conservation and Development have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1082: (1930-46 not previously published). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.06 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation and some regulation at low flow caused by small powerplants upstream from station. Satellite data transmitter at station.

AVERAGE DISCHARGE.--55 years, 1.471 ft³/s, 13.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,300 ft³/s Sept. 18, 1945, gage height, 17.20 ft; minimum, 5.5 ft³/s Oct. 10, 1954, gage height, 0.35 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 2	0900	20,000	8.57	Aug. 18	1700	*30,000	*10.32

Minimum discharge, 44 ft³/s Sept. 30, gage height 0.79 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	137	562	223	12000	1580	605	212	245	354	1810	3280
2	251	135	358	153	18300	1240	437	236	194	512	1950	1210
3	284	146	454	1760	16700	1080	432	577	148	792	1050	753
4	263	136	679	10300	12500	922	517	2050	155	642	778	632
5	242	127	972	9880	3310	861	338	1270	168	445	479	511
6	219	125	1310	4550	4580	794	407	762	179	325	482	521
7	165	113	1820	1880	5230	671	419	497	168	212	270	343
8	152	116	1020	1180	3340	664	374	345	1000	193	194	354
9	142	116	587	947	2000	653	401	327	2580	335	360	314
10	146	126	396	731	1480	608	302	312	1130	408	366	310
11	143	124	331	666	1240	596	263	288	621	244	371	318
12	140	123	400	623	5320	600	260	346	454	291	213	272
13	137	136	438	588	8670	590	344	443	347	160	335	232
14	133	160	277	529	3940	542	334	369	392	299	289	129
15	123	165	242	523	2130	603	381	293	237	157	250	174
16	132	147	331	483	1570	558	462	352	241	333	232	184
17	108	132	270	502	1300	454	1290	964	565	320	197	193
18	98	135	232	477	1070	440	847	1200	753	274	13500	164
19	97	142	242	527	1040	401	585	969	520	300	15700	167
20	109	141	236	550	954	441	457	653	543	291	17400	167
21	107	154	197	490	956	429	406	419	542	140	9120	320
22	104	114	266	358	897	460	380	346	414	130	5580	269
23	129	112	226	390	803	766	357	345	180	133	3680	101
24	138	162	191	422	826	1780	341	520	121	149	1650	155
25	154	132	180	344	746	1480	318	897	250	1500	3820	155
26	146	135	169	364	1950	1240	287	596	162	6430	8530	184
27	168	144	316	425	4390	974	312	433	190	3940	3970	195
28	142	153	273	480	2700	781	274	233	118	1830	2630	135
29	135	181	190	343	---	681	229	257	110	1040	1730	86
30	138	421	135	351	---	624	230	245	131	844	1300	51
31	142	---	159	1220	---	485	---	231	---	968	4770	---
TOTAL	4713	4390	13459	42259	119942	23998	12589	16987	12858	23991	103006	11879
MEAN	152	146	434	1363	4284	774	420	548	429	774	3323	396
MAX	284	421	1820	10300	18300	1780	1290	2050	2580	6430	17400	3280
MIN	97	112	135	153	746	401	229	212	110	130	194	51
CFSM	.11	.10	.30	.95	2.99	.54	.29	.38	.30	.54	2.32	.28
IN.	.12	.11	.35	1.10	3.11	.62	.33	.44	.33	.62	2.67	.31

CAL YR 1984 TOTAL 856100 MEAN 2339 MAX 23500 MIN 58 CFSM 1.63 IN. 22.21
WTR YR 1985 TOTAL 390071 MEAN 1069 MAX 18300 MIN 51 CFSM .75 IN. 10.12

02102000 DEEP RIVER AT MONCURE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/30	0930	WATER	0	1.19	137	220	7.10	21.0		7.9	20
84/11/26	1000	WATER	0	1.17	130	162	7.30	7.0	2.9	13.0	220
84/12/14	0930	WATER	0	1.48	270	82	7.50	7.0		10.5	40
85/01/11	0845	WATER	0	2.03	653	50		7.0		11.2	
85/02/20	0910	WATER	0	2.37	974	50	6.70	6.0	39.0	12.9	20
85/03/26	0830	WATER	0	2.62	1270	75	7.00	12.0		11.3	140
85/04/23	0910	WATER	0	1.62	355	102	7.20	21.0		9.0	30
85/05/17	0925	WATER	0	2.16	785	121	7.00	21.0	9.8	7.9	10
85/06/13	0900	WATER	0	1.62	355	90	7.00	22.0		8.0	60
85/07/30	0850	WATER	0	2.21	847	100	6.90	25.0		7.8	20
85/08/20	0850	WATER	0.1	8.14	17900	49	6.90	25.0	4.1	6.5	1500
85/09/23	0915	WATER	0.1	1.07	104	91	7.10	21.0		9.8	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	0930	WATER	0	53	4	170					
84/11/26	1000	WATER	0	62	2	190	.52	.010	.400	.250	.180
84/12/14	0930	WATER	0	36	4	130					
85/01/11	0845	WATER	0		18	120					
85/02/20	0910	WATER	0	91	14	110	.60	.100	.300	.120	.050
85/03/26	0830	WATER	0	34	12	120					
85/04/23	0910	WATER	0	88	21	110					
85/05/17	0925	WATER	0	26	16	130	.85	.060	.500	.250	.150
85/06/13	0900	WATER	0	27	46	160					
85/07/30	0850	WATER	0	15	9	140					
85/08/20	0850	WATER	0.1	13	61	150	.35	.060	.700	.240	.240
85/09/23	0915	WATER	0.1	26	4	88					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/26	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/20	0910	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/17	0925	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/20	0850	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02102192 BUCKHORN CREEK NEAR CORINTH, NC

LOCATION.--Lat 35°33'34", long 78°58'25", Chatham County, Hydrologic Unit 03030004, on left bank at upstream side of bridge on State Highway 42, 0.2 mi downstream from White Oak Creek, 1.2 mi downstream from Shearon Harris Main Reservoir, and 2 mi east of Corinth.

DRAINAGE AREA.--76.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1972 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 154.63 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Since Dec. 1, 1980, considerable regulation by Shearon Harris Main Reservoir (station 02102190).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--13 years, 69.7 ft³/s, 12.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,920 ft³/s Feb. 2, 1973, gage height, 20.02 ft; minimum, 0.01 ft³/s Sept. 2, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 381 ft³/s Feb. 2, gage height, 4.55 ft; minimum, 0.35 ft³/s June 29, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	14	29	8.4	108	92	27	2.1	1.9	11	49	21
2	7.3	13	30	10	319	87	26	1.8	1.9	8.1	74	18
3	4.6	21	24	63	304	80	22	13	1.5	4.2	53	16
4	4.7	9.6	8.4	109	269	74	20	4.8	1.2	3.3	43	12
5	5.4	6.5	23	106	252	70	18	3.4	1.1	4.8	36	5.5
6	8.0	9.7	26	94	284	68	17	2.6	1.9	3.5	32	4.4
7	9.7	7.9	18	85	263	60	17	2.6	2.5	3.7	29	4.0
8	11	3.9	14	78	233	56	15	2.6	3.7	2.3	27	3.7
9	11	3.8	14	71	198	54	16	1.7	2.3	1.5	25	2.9
10	14	4.2	13	67	170	50	11	1.9	1.4	1.0	24	2.2
11	22	6.1	14	61	150	48	9.0	2.6	1.1	12	21	3.0
12	20	6.7	13	55	289	46	8.7	2.9	1.1	5.4	19	2.9
13	22	2.7	13	47	287	44	8.4	3.6	1.6	3.8	16	4.9
14	19	2.3	13	44	257	43	10	3.2	1.1	3.1	13	1.2
15	21	4.5	12	41	229	41	11	2.8	.91	1.9	11	.52
16	21	9.0	12	36	201	37	12	11	3.1	6.4	9.4	1.2
17	21	11	12	40	178	38	17	7.6	4.3	10	9.5	.43
18	21	16	11	40	158	36	13	6.4	2.3	4.6	17	.44
19	21	24	11	37	142	30	12	3.9	2.3	2.0	16	.48
20	21	26	11	39	133	28	11	2.5	1.6	1.1	14	.40
21	22	24	12	32	117	28	10	4.0	.92	.72	15	.46
22	29	26	12	30	105	37	8.5	11	.79	5.7	24	.67
23	29	22	12	28	96	36	7.2	7.6	.71	12	18	1.1
24	29	22	11	27	89	35	5.9	9.9	.61	9.6	16	.99
25	30	23	12	27	84	35	6.6	6.9	.66	59	19	1.5
26	20	23	10	26	104	33	4.9	4.3	.66	31	21	1.7
27	6.7	23	9.2	23	108	31	4.6	3.1	.50	28	24	2.0
28	12	29	8.6	25	101	30	4.9	2.9	.43	26	27	1.1
29	15	33	8.5	27	---	30	7.9	3.8	1.8	25	25	1.1
30	17	28	8.9	26	---	29	2.7	2.5	11	25	22	1.1
31	17	---	9.4	46	---	29	---	1.6	---	25	22	---
TOTAL	520.3	454.9	435.0	1440.4	5230	1435	364.3	140.6	56.89	340.72	770.9	116.89
MEAN	16.8	15.2	14.0	46.7	187	46.3	12.1	4.54	1.90	11.0	24.9	3.90
MAX	30	33	30	109	319	92	27	13	11	59	74	21
MIN	4.6	2.3	8.4	8.4	84	28	2.7	1.6	.43	.72	9.4	.40
CFSM	.22	.20	.18	.61	2.45	.61	.16	.06	.02	.14	.33	.05
IN.	.25	.22	.21	.71	2.55	.70	.18	.07	.03	.17	.38	.06

CAL YR 1984 TOTAL 42770.35 MEAN 117 MAX 781 MIN .21 CFSM 1.53 IN. 20.86
WTR YR 1985 TOTAL 11313.90 MEAN 31.0 MAX 319 MIN .40 CFSM .41 IN. 5.52

02102192 BUCKHORN CREEK NR CORINTH, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/30	0820	WATER	0	2.58	15	60	6.90	20.0		5.6	120
84/11/26	0840	WATER	0	2.09	24	35	7.20	6.0	3.3	12.0	460
84/12/14	0830	WATER	0	1.92	12	41	7.60	9.0		8.2	50
85/01/11	0745	WATER	0	2.34	60	35		7.0		10.8	
85/02/20	0800	WATER	0	3.12	138	36	6.90	6.0	3.5	12.4	30
85/03/26	0730	WATER	0	2.01	33	40	7.00	11.0		10.8	40
85/04/23	0800	WATER	0	1.57	7	55	6.80	22.0		7.4	10
85/05/17	0815	WATER	0	1.58	7	53	7.00	21.0	2.8	6.6	10
85/06/13	0810	WATER	0	1.37	1	61	6.90	21.0		6.2	50
85/07/30	0800	WATER	0	2.00	25	60	6.90	25.0		7.0	10
85/08/20	0750	WATER	0.1	1.77	14	60	6.90	25.0	2.0	7.0	20
85/09/23	0820	WATER	0.1	1.47	1	61	7.00	20.0		7.2	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	0820	WATER	0	31	1	92					
84/11/26	0840	WATER	0	25	3	100	.01	.030	.200	.020	.010K
84/12/14	0830	WATER	0	24	1K	65					
85/01/11	0745	WATER	0		9	72					
85/02/20	0800	WATER	0	74	5	61	.12	.040	.300	.020	.010K
85/03/26	0730	WATER	0	8	5	100					
85/04/23	0800	WATER	0	57	3	69					
85/05/17	0815	WATER	0	20	4	80	.03	.040	.400	.030	.010K
85/06/13	0810	WATER	0	17	2	83					
85/07/30	0800	WATER	0	18	3	56					
85/08/20	0750	WATER	0.1	19	1	51	.01	.060	.300	.020	.010K
85/09/23	0820	WATER	0.1	28	2	82					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/26	0840	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/20	0800	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/17	0815	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/20	0750	WATER	0.1	10K	20K	50K	20	100K	.2K	100K	120

K Less than noted value.

02102500 CAPE FEAR RIVER AT LILLINGTON, NC

LOCATION.--Lat 35°24'22", long 78°48'48", Harnett County, Hydrologic Unit 03030004, on right bank 60 ft downstream from downstream bridge on U.S. Highway 401, 1,860 ft downstream from Southern Railway bridge, 0.5 mi north of Lillington, 1 mi downstream from Neal Creek, and at mile 178.

DRAINAGE AREA.--3,464 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1923 to current year.

REVISED RECORDS.--WSP 1002: 1930(M). WSP 1032: 1942(m). WSP 1303: 1944(M). WSP 1333: 1945. WSP 1383: 1924-29, 1936. WSP 1703: 1929. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 104.62 ft above National Geodetic Vertical Datum of 1929. Dec. 6, 1923 to Oct. 7, 1927, nonrecording gage and Oct. 8, 1927 to Dec. 2, 1975, water-stage recorder at site 60 ft upstream in bridge pier at same datum. Gage height telemeter and satellite data transmitter at the station.

REMARKS.--No estimated daily discharges. Records good. Some regulation at high flows, December 1972 to August 1981, caused by temporary storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Diurnal fluctuation and slight regulation at low flow caused by powerplants above station. Fluctuation and regulation by Buckhorn Reservoir 13 mi above station ended in December 1962.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--61 years (water years 1924-85), 3,407 ft^3/s, 13.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft^3/s Sept. 19, 1945, gage height, 33.19 ft, from floodmark, from rating curve extended above 76,000 ft^3/s; maximum daily, 140,000 ft^3/s Sept. 19, 1945; minimum discharge, 11 ft^3/s Oct. 14, 15, 1954, gage height, -0.17 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 30,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 19	0100	*24,100	*12.40				

Minimum discharge, 509 ft^3/s June 24, gage height, 1.51 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	898	717	1110	715	9280	7120	1430	659	681	986	1760	7590
2	844	709	1060	740	19500	6050	926	670	619	1130	3120	3960
3	872	699	1180	1130	20400	4280	795	760	599	826	4120	2150
4	698	720	975	10000	17700	2900	1010	1730	675	1010	4130	1780
5	641	714	1340	12900	11300	2710	1090	2190	720	950	3310	1040
6	623	695	1670	12300	11100	2330	916	1320	759	794	763	867
7	614	679	2240	9260	16600	2170	1000	1060	737	898	831	856
8	707	666	1930	8140	18100	2170	985	898	803	791	659	670
9	696	679	1280	7760	15800	2160	954	779	3070	824	825	824
10	691	677	1030	7450	14700	1980	942	760	1910	915	908	787
11	693	738	841	5450	14100	1600	853	810	1020	867	838	769
12	689	719	779	2780	15600	1560	837	758	766	897	852	743
13	685	694	885	2320	14700	1210	865	848	737	844	666	713
14	680	703	826	1970	11600	1180	948	884	692	858	705	670
15	658	732	706	1870	14200	1140	928	773	718	876	680	596
16	668	728	694	1470	11200	1170	1030	873	653	787	617	627
17	673	700	768	1430	5420	1180	1760	958	804	1030	759	650
18	670	690	692	1140	4040	996	1700	1590	1060	781	6190	629
19	662	717	677	1090	3270	976	1190	1510	1090	754	18200	633
20	654	722	692	1070	1820	979	1070	1230	898	752	18000	650
21	674	710	655	1080	1700	1020	939	994	927	791	13600	714
22	689	702	777	1010	2110	1270	841	946	866	683	6740	854
23	700	669	803	868	3180	1310	851	1280	709	728	10600	713
24	702	687	747	914	3140	2120	814	1410	548	711	7840	649
25	704	734	729	894	3030	2810	797	3200	727	1660	7490	649
26	714	694	695	883	3630	4280	771	3210	796	6300	15000	687
27	722	699	760	882	6640	3060	743	2960	739	5670	10800	672
28	745	738	854	1010	6550	1900	727	2680	678	2780	8720	701
29	760	796	791	1040	---	1670	710	1940	650	1580	7600	624
30	716	792	698	938	---	1680	657	726	869	1210	6590	590
31	711	---	687	1920	---	1550	---	645	---	1200	5960	---
TOTAL	21853	21319	29571	102424	280410	68531	29079	41051	26520	40883	168873	34057
MEAN	705	711	954	3304	10010	2211	969	1324	884	1319	5448	1135
MAX	898	796	2240	12900	20400	7120	1760	3210	3070	6300	18200	7590
MIN	614	666	655	715	1700	976	657	645	548	683	617	590
CFSM	.20	.21	.28	.95	2.89	.64	.28	.38	.26	.38	1.57	.33
IN.	.23	.23	.32	1.10	3.01	.74	.31	.44	.28	.44	1.81	.37

CAL YR 1984	TOTAL	2001161	MEAN	5468	MAX	29600	MIN	574	CFSM	1.58	IN.	21.49
WTR YR 1985	TOTAL	864571	MEAN	2369	MAX	20400	MIN	548	CFSM	.68	IN.	9.28

02102500 CAPE FEAR RIVER AT LILLINGTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/16	1300	WATER	0	1.74	667	155	7.00	21.0	5.5	7.3	30
84/11/14	1345	WATER	0	1.77	689	186	6.95	12.0	4.1	11.0	50
84/12/06	1345	WATER	0	2.78	1640	171	6.71	9.0	6.1	10.4	70
85/01/16	1202	WATER	0	2.62	1470	83	6.95	6.0		11.8	70
85/02/06	1040	WATER	0	7.67	10100	61	7.20	7.0		11.6	820
85/03/11	1210	WATER	0	2.72	1570	100	7.01	12.0	17.0	9.4	20
85/04/18	1450	WATER	0	2.73	1590	56	7.34	19.0		8.0	30
85/05/21	1010	WATER	0	2.71	1020	120	7.24	24.0		6.4	10
85/06/10	0940	WATER	0	3.08	2000	147	7.11	26.0	11.0	6.2	140
85/07/09	0955	WATER	0	1.88	774	149	7.24	27.0		6.4	90
85/08/13	1155	WATER	0.15	1.67	617	128	6.85	28.0		5.4	20
85/09/16	1137	WATER	0.1	1.72	653	104	6.90	22.0	8.2	7.4	40

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/16	1300	WATER	0	40	7	130	.74	.020	.700	.140	.090
84/11/14	1345	WATER	0	40	3	130	.74	.040	.600	.190	.130
84/12/06	1345	WATER	0	29	17	160	.91	.130	.600	.350	.250
85/01/16	1202	WATER	0	26	8	130					
85/02/06	1040	WATER	0	13	41	150					
85/03/11	1210	WATER	0	23	7	110	.60	.060	.400	.120	.050
85/04/18	1450	WATER	0	33	10	110					
85/05/21	1010	WATER	0	28	15	130					
85/06/10	0940	WATER	0	30	19	130	.89	.070	.400	.240	.160
85/07/09	0955	WATER	0	29	35	150					
85/08/13	1155	WATER	0.15	27	41	130					
85/09/16	1137	WATER	0.1	29	11	91	.33	.020	.300	.100	.040

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/06	1345	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/11	1210	WATER	0	10K	20K	50K	20K	100K	.5	100K	40
85/06/10	0940	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/09/16	1137	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

0210289715 MILL CREEK TRIBUTARY NEAR SOUTHERN PINES, NC

LOCATION.--Lat 35°09'23", long 79°22'04", Moore County, Hydrologic Unit 03030004, on right bank 0.9 mi upstream from Secondary Road 2033 and 1.5 mi southeast of Southern Pines.

DRAINAGE AREA.--0.53 mi^2.

PERIOD OF RECORD.--September 1983 to current year.

REMARKS.--Station operated as partial-record site in the National Acid Precipitation Assessment Program for defining effects of atmospheric deposition on surface-water chemistry (station 0213228795).

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	*STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM DIS-SOLVED (UG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)
OCT , 1984												
31...	0830	.13	16	5.3	19.0	2	--	.18	.30	1.7	170	<1.0
DEC												
19...	0930	.17	15	5.2	14.5	2	--	.22	.25	1.8	120	<1.0
FEB , 1985												
21...	0830	.13	15	5.2	8.5	2	--	.20	.30	1.7	160	<1.0
APR												
24...	1000	.15	15	5.2	17.5	1	--	.12	.26	2.0	160	--
24...	1005	.15	15	5.2	17.5	1	--	.11	.25	1.7	140	--
JUL												
01...	1730	.19	14	4.8	20.0	0	--	.03	.22	1.9	150	--
SEP												
05...	0900	.17	15	5.1	22.0	1	8.1	.17	.22	1.7	130	<.500

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN NITRATE DISSOLV (UG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT , 1984											
31...	.3	3.0	.02	5.6	<10.0	.049	<.002	120	13	1200	4.2
DEC											
19...	.5	3.0	.01	5.2	<10.0	.014	<.002	60	9	120	1.2
FEB , 1985											
21...	.8	2.8	.01	4.8	30.0	.040	<.001	60	9	49	1.0
APR											
24...	.3	3.0	.02	--	12.0	.009	<.010	--	--	--	1.9
24...	.3	3.0	.02	--	11.0	.012	<.010	--	--	--	2.2
JUL											
01...	.5	3.2	.03	5.6	13.0	.021	<.010	90	5	74	2.1
SEP											
05...	.3	3.2	.02	5.6	<10.0	.022	<.001	130	8	800	4.1

*Streamflow figures are actual discharge measurements.

CAPE FEAR RIVER BASIN

02102908 FLAT CREEK NEAR INVERNESS, NC

LOCATION.--Lat 35°10'54", long 79°10'40", Hoke County, Hydrologic Unit 03030004, Fort Bragg military reservation, on left bank 15 ft downstream from culvert on Manchester Road, 0.4 mi upstream from mouth, and 3.6 mi east of Inverness.

DRAINAGE AREA.--7.63 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1968 to current year.

REVISED RECORDS.--WDR NC-72-1: 1968-70 (M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 191.18 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Some diurnal fluctuation at low flow during growing season.

COOPERATION.--Chemical and biological data shown in last table were provided the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--17 years, 12.4 ft³/s, 22.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 394 ft³/s Apr. 1, 1973, gage height, 7.30 ft; minimum, 2.4 ft³/s Feb. 12, 1969, gage height 0.85 ft, due to regulation from unknown source; minimum unregulated, 2.6 ft³/s July 15, 16, 1981, gage height, 0.74 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 6	1430	62	2.01	July 25	2145	*127	*3.08
June 8	1045	104	2.67				

Minimum discharge, 3.7 ft³/s June 3, 4, 5; minimum gage height, 0.77 ft June 3, 4, 5, 29, July 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	10	9.4	7.6	19	10	7.8	6.1	4.7	39	31	9.4
2	12	9.9	9.2	7.7	35	10	7.6	5.9	4.4	14	27	8.7
3	10	9.6	20	22	26	9.8	7.6	12	4.3	8.6	12	8.2
4	9.5	9.6	12	30	15	9.7	7.6	9.6	4.3	6.9	9.4	7.8
5	9.2	11	17	18	17	9.9	7.2	7.0	6.0	6.7	8.4	7.4
6	9.0	10	22	11	42	9.5	7.8	6.3	44	7.3	8.1	7.1
7	9.3	9.6	12	10	22	9.3	7.5	5.8	14	6.8	7.9	6.9
8	11	9.5	11	9.8	15	9.4	7.2	5.8	54	5.8	11	6.9
9	9.4	9.7	10	9.5	14	9.0	7.2	6.7	13	5.3	12	7.0
10	9.0	9.7	9.7	9.3	14	8.9	7.2	8.3	7.8	5.0	10	8.2
11	8.8	12	9.5	9.5	13	8.7	7.2	6.8	6.9	7.8	8.0	7.0
12	8.6	15	9.3	9.3	29	8.8	7.2	6.7	6.3	6.0	7.3	6.8
13	8.8	10	9.1	9.0	17	8.3	7.2	6.8	5.9	5.3	7.1	6.9
14	8.8	9.8	9.1	9.0	14	8.3	7.2	5.9	5.5	5.2	6.6	6.7
15	8.7	9.5	8.8	9.0	13	8.1	7.6	5.3	5.4	5.3	6.4	6.6
16	8.8	9.6	8.9	8.9	12	8.0	13	18	10	4.9	6.3	6.5
17	9.0	9.5	9.1	13	12	10	16	16	9.5	14	12	6.5
18	9.6	9.5	8.8	13	12	8.9	8.9	8.1	6.2	6.5	30	6.4
19	10	9.6	8.6	10	12	8.4	8.0	6.4	6.3	5.5	16	6.4
20	9.7	9.5	8.6	9.5	16	8.5	7.4	5.8	5.7	5.2	9.8	6.4
21	9.4	9.2	8.8	8.8	13	8.1	7.0	5.7	5.1	5.0	28	6.4
22	12	9.4	8.8	8.7	12	23	6.7	8.4	4.8	5.0	24	6.9
23	10	9.0	8.5	9.1	12	19	6.5	12	4.7	8.8	12	6.9
24	9.8	9.1	8.3	9.5	11	11	6.4	7.5	4.7	7.1	10	6.6
25	9.6	9.0	8.5	9.7	11	12	6.4	7.1	4.9	45	16	6.7
26	9.4	8.9	7.8	9.4	12	10	6.1	5.8	6.0	41	30	6.8
27	9.7	8.9	7.8	9.0	11	9.4	6.0	5.2	5.2	12	14	7.2
28	9.8	12	7.8	9.5	11	8.7	6.2	4.6	4.8	11	11	6.1
29	12	14	7.7	11	---	8.5	8.4	4.9	4.7	20	9.7	6.1
30	10	10	7.7	10	---	8.2	6.5	5.0	19	18	9.9	6.2
31	10	---	7.6	20	---	8.0	---	5.3	---	17	13	---
TOTAL	310.9	302.1	311.4	349.8	462	307.4	230.6	230.8	288.1	361.0	423.9	209.7
MEAN	10.0	10.1	10.0	11.3	16.5	9.92	7.69	7.45	9.60	11.6	13.7	6.99
MAX	20	15	22	30	42	23	16	18	54	45	31	9.4
MIN	8.6	8.9	7.6	7.6	11	8.0	6.0	4.6	4.3	4.9	6.3	6.1
CFSM	1.31	1.32	1.31	1.48	2.16	1.30	1.01	.98	1.26	1.52	1.80	.92
IN.	1.52	1.47	1.52	1.71	2.25	1.50	1.12	1.13	1.40	1.76	2.07	1.02

CAL YR 1984	TOTAL	5150.9	MEAN	14.1	MAX	200	MIN	5.0	CFSM	1.85	IN.	25.11
WTR YR 1985	TOTAL	3787.7	MEAN	10.4	MAX	54	MIN	4.3	CFSM	1.36	IN.	18.47

02102908 FLAT CREEK NEAR INVERNESS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/30	1300	WATER	0	.98	10	12	5.67	22.0		7.9	1100
84/11/13	1600	WATER	0	.97	10	10	5.04	11.0		10.0	30
84/12/12	0945	WATER	0	.96	9	13	5.03	9.0	2.0	11.4	110
85/01/16	1042	WATER	0	.94	9	21	5.35	5.0		12.2	10K
85/02/06	0915	WATER	0	1.64	42	34	4.70	7.0		8.2	100
85/03/11	0954	WATER	0	.94	8	12	5.04	11.0	2.0	9.2	20
85/04/18	1330	WATER	0	.94	8	57	5.16	18.0		8.4	20
85/05/21	0850	WATER	0	.85	6	20	5.13	19.0		8.4	30
85/06/10	0745	WATER	0	.93	8	16	4.75	23.0	7.8	7.8	200
85/07/09	0820	WATER	0	.83	5	11	5.28	22.0		7.0	30
85/08/13	1030	WATER	0.15	.88	7	10	4.65	23.0		7.6	290
85/09/16	0945	WATER	0.1	.86	6	11	5.11	20.0	3.3	8.8	70

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	1300	WATER	0	2	5	53					
84/11/13	1600	WATER	0	2	2	33					
84/12/12	0945	WATER	0	2	2	120	.06	.020	.100	.010K	
85/01/16	1042	WATER	0		1	35					
85/02/06	0915	WATER	0	1	16	55					
85/03/11	0954	WATER	0	2	4	23	.07	.020	.010K	.010K	.010K
85/04/18	1330	WATER	0	3	5	32					
85/05/21	0850	WATER	0	2	2	44					
85/06/10	0745	WATER	0	1	3	71	.04	.020	.300	.020	.010K
85/07/09	0820	WATER	0	3	5	48					
85/08/13	1030	WATER	0.15	1	1	20					
85/09/16	0945	WATER	0.1	2	8	25	.06	.010	.200	.010	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/12	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/11	0954	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/10	0745	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/16	0945	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC

LOCATION.--Lat 34°50'05", long 78°49'27", Bladen County, Hydrologic Unit 03030005, on right bank 100 ft upstream from William O. Huske Lock, 1 mi downstream from Cumberland-Bladen County line, 7 mi north of Tarheel, 9 mi upstream from Phillips Creek, and at mile 123.

DRAINAGE AREA.--4,852 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1964, published as Cape Fear River at Lock 3 near Tarheel, NC.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete lock and dam control. Datum of gage is 28.968 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 8, 1939, nonrecording gage on upper lock wall 100 ft downstream at same datum. Auxiliary water-stage recorder 1.8 mi downstream from base gage; prior to Jan. 14, 1943, auxiliary nonrecording gage 400 ft downstream on lower end of lock wall; Jan. 14, 1943 to Sept. 30, 1953, auxiliary water-stage recorder at site 600 ft downstream.

REMARKS.--No estimated daily discharges. Records good. Slight regulation at high flows, December 1972 to August 1981, caused by temporary storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Slight diurnal fluctuation and some regulation for short periods at low flow caused by powerplants above station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--48 years, 5,002 ft³/s, 14.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined; maximum gage height, 43.44 ft Sept. 22, 1945; maximum daily discharge, 112,000 ft³/s Sept. 21, 1945; minimum discharge, 170 ft³/s Sept. 20, 1954; minimum daily, 208 ft³/s Sept. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,700 ft³/s Feb. 4, gage height, 14.26 ft; minimum discharge, 841 ft³/s June 4, gage height, 1.17 ft; minimum daily, 869 ft³/s June 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	1590	1730	1460	5050	8000	2320	1060	1020	3150	4030	6560
2	2330	1450	1870	1560	13500	8250	2090	1100	954	3310	4910	7100
3	2100	1430	2020	2010	20200	6750	1600	1170	893	2800	5750	4400
4	1870	1310	2240	6130	21800	4910	1400	1430	869	2190	6080	3000
5	1660	1350	2210	14100	21000	4220	1570	2520	927	2000	5620	2520
6	1430	1460	3120	15000	17700	3890	1710	2360	1290	1640	3770	2050
7	1290	1360	3400	13400	17600	3470	1510	1820	1520	1370	1860	1560
8	1310	1340	3630	11700	20500	3270	1580	1510	2330	1310	1780	1420
9	1620	1250	3100	10200	20800	3220	1570	1320	3030	1240	1650	1230
10	1510	1280	2470	9210	18800	3120	1470	1190	3880	1280	1790	1290
11	1400	1250	2180	8300	17500	2970	1400	1270	2870	1400	1720	1290
12	1310	1290	1860	5760	17800	2690	1430	1240	1960	1400	1670	1240
13	1230	1370	1710	3840	18800	2690	1370	1290	1530	1420	1560	1150
14	1200	1380	1660	3290	17400	2190	1380	1400	1310	1290	1390	1170
15	1180	1390	1600	3170	16100	1860	1460	1390	1170	1350	1270	1030
16	1230	1420	1410	2880	16200	1830	1670	1470	1130	1390	1150	945
17	1290	1330	1460	2630	12100	1850	2220	1690	1540	1350	1130	987
18	1270	1230	1510	2780	7630	1960	3010	2120	1780	1430	1510	1040
19	1230	1240	1530	2590	6040	1880	2630	2290	2140	1280	13100	965
20	1300	1340	1480	2430	4750	1810	2130	2130	1890	1200	16500	1000
21	1230	1350	1490	2430	4040	1790	1730	1800	1520	1140	17800	1030
22	1280	1290	1470	2320	3930	2100	1500	1470	1350	1140	13100	1060
23	1350	1330	1450	2030	4480	2990	1370	1610	1210	1410	10200	1170
24	1420	1290	1440	1830	4790	3190	1320	1770	1040	1570	10700	1170
25	1460	1270	1540	1870	4710	4170	1210	2300	920	2490	8700	1080
26	1460	1290	1510	1780	4780	5000	1080	3420	1120	5750	10500	1140
27	1430	1360	1430	1730	5500	5070	1210	3320	1080	9260	13200	1090
28	1350	1510	1500	1760	7290	3700	1140	3160	1020	7330	12100	1120
29	1410	1700	1590	2050	---	2780	1090	2730	1000	6450	9830	1100
30	1550	1700	1450	2080	---	2600	1170	1940	1590	5610	8530	1030
31	1620	---	1380	2450	---	2400	---	1090	---	4320	6710	---
TOTAL	45090	41150	58440	144770	350790	106620	48340	56380	45883	80270	199610	52937
MEAN	1455	1372	1885	4670	12530	3439	1611	1819	1529	2589	6439	1765
MAX	2330	1700	3630	15000	21800	8250	3010	3420	3880	9260	17800	7100
MIN	1180	1230	1380	1460	3930	1790	1080	1060	869	1140	1130	945
CFSM	.30	.28	.39	.96	2.58	.71	.33	.37	.32	.53	1.33	.36
IN.	.35	.32	.45	1.11	2.69	.82	.37	.43	.35	.62	1.53	.41

CAL YR 1984 TOTAL 2746610 MEAN 7504 MAX 29100 MIN 1180 CFSM 1.55 IN. 21.06
WTR YR 1985 TOTAL 1230280 MEAN 3371 MAX 21800 MIN 869 CFSM .69 IN. 9.43

02105500 CAPE FEAR R AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/30	1140	WATER	0	1.78	1540	132	6.73	22.0		7.6	30
84/11/27	1615	WATER	0	1.66	1390	112	6.34	13.0		8.6	380
84/12/10	1600	WATER	0	2.38	2390	132	6.94	10.0	6.7	10.7	500
85/01/29	1515	WATER	0	2.18	2090	77	6.40	5.0		12.4	40
85/02/13	1407	WATER	0	12.12	18500	75	6.40	6.0		12.0	900
85/03/28	1345	WATER	0			104	7.26	17.0	5.7	8.6	30
85/04/23	1410	WATER	0	1.60	1320	90	7.04	22.0		8.0	10K
85/05/28	1310	WATER	0	2.84	3170	198	6.97	23.0		7.6	10
85/06/24	1400	WATER	0	1.33	1010	102	6.86	25.0	9.0	7.6	20
85/07/23	1245	WATER	0	1.68	1420	133	7.03	27.0		6.2	
85/08/26	1310	WATER	0.15	5.13	8750	82	6.81	24.0		6.8	150
85/09/26	1150	WATER	0.1	1.48	1180	99	6.93	24.0	7.6	7.2	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	1140	WATER	0	28	6	110					
84/11/27	1615	WATER	0	16	3	89					
84/12/10	1600	WATER	0	17	7	130	.76	.240	.600	.310	.220
85/01/29	1515	WATER	0	18	5	81					
85/02/13	1407	WATER	0	17	37	140					
85/03/28	1345	WATER	0	25	9	86	.83	.110	.400	.180	.090
85/04/23	1410	WATER	0	22	11	100					
85/05/28	1310	WATER	0	33	15	130					
85/06/24	1400	WATER	0	20	8	120	.51	.290	.800	.330	.200
85/07/23	1245	WATER	0	25	16	110					
85/08/26	1310	WATER	0.15	20	55	180					
85/09/26	1150	WATER	0.1	25	9	110	.52	.260	.600	.300	.200

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/10	1600	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/28	1345	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/24	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/26	1150	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC
(National stream-quality accounting network station)

LOCATION.--Lat 34°24'15", long 78°17'38", Bladen County, Hydrologic Unit 03030005, on right bank near upstream end of lock No. 1, 1.3 mi upstream from Natmore Creek, 2.0 mi upstream from bridge on State Highway 11, 4.6 mi southeast on Kelly, and at mile 67.

DRAINAGE AREA.--5,255 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1969 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder with concrete lock and dam control. Datum of gage is 2.90 ft below National Geodetic Vertical Datum of 1929 (U. S. Army Corps of Engineers bench mark).

REMARKS.--No estimated daily discharges. Records fair. Slight regulation at high flow December 1972 to August 1981, caused by storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Slight diurnal fluctuation and some regulation for short periods at low flow caused by powerplants upstream from station. The city of Wilmington diverted an average of 12.4 ft³/s for municipal water supply, most of which was returned as sewage downstream from station. Gage height telemeter at station.

AVERAGE DISCHARGE.--16 years, 5,809 ft³/s, 15.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,700 ft³/s Mar. 3, 1979, gage height, 24.92 ft from floodmarks; minimum, 380 ft³/s Oct. 7, 1982, gage height, 14.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,400 ft³/s Feb. 6, 11, gage height, 20.52 ft; minimum, 861 ft³/s June 4, gage height, 14.91 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1760	1670	1710	1460	3220	8320	2490	1210	1240	2070	4730	7580
2	2260	1600	1750	1510	7320	8780	2300	1190	1100	3090	4680	8390
3	2490	1540	1880	1720	13200	8420	1810	1220	989	3070	5390	6950
4	2250	1470	2110	2850	16700	7030	1590	1370	922	2550	6040	4240
5	1980	1400	2220	8170	18700	5380	1510	1730	925	2090	6090	2990
6	1770	1480	2550	12400	20000	4650	1700	2490	1160	1850	5490	2260
7	1600	1480	3260	14200	19900	4110	1660	2160	1390	1550	3340	1710
8	1500	1430	3530	14200	19300	3760	1620	1730	1800	1410	2180	1510
9	1580	1390	3570	12900	19700	3590	1620	1510	2480	1330	2110	1360
10	1680	1350	2980	11300	20200	3480	1550	1400	3410	1290	1990	1340
11	1600	1370	2500	10100	20100	3320	1550	1340	3570	1340	1960	1390
12	1510	1350	2140	8600	19900	3130	1520	1380	2620	1390	1850	1400
13	1430	1420	1830	5860	19500	2980	1520	1380	1870	1410	1760	1320
14	1380	1430	1730	4200	19400	2730	1500	1420	1520	1390	1620	1250
15	1340	1430	1690	3580	19100	2280	1500	1450	1340	1340	1490	1220
16	1350	1460	1600	3320	18300	1980	1590	1470	1290	1420	1390	1080
17	1380	1440	1500	3000	17700	2010	1840	1570	1340	1460	1300	1040
18	1410	1380	1550	2980	15300	2080	2480	1750	1570	1430	1390	1080
19	1400	1340	1570	2970	10600	2080	2900	2120	1810	1400	3690	1080
20	1390	1370	1560	2780	7540	1980	2550	2160	1970	1320	11500	1060
21	1390	1390	1530	2640	5710	1900	2030	2010	1730	1210	14600	1080
22	1370	1400	1540	2610	4960	2090	1690	1690	1490	1170	16000	1120
23	1420	1390	1520	2500	4810	2750	1560	1550	1370	1290	14400	1190
24	1460	1390	1490	2080	5290	3310	1520	1670	1230	1440	12700	1270
25	1510	1360	1530	1930	5390	3690	1450	1770	1060	1880	11300	1220
26	1520	1370	1560	1920	5350	4210	1340	2620	1030	3650	9790	1220
27	1510	1380	1520	1820	5640	5010	1330	3290	1100	6970	11800	1190
28	1480	1460	1470	1820	7240	4730	1270	3240	1060	8790	13400	1180
29	1500	1620	1560	1910	---	3580	1160	3010	1050	7740	12700	1180
30	1640	1700	1550	2130	---	2900	1140	2540	1120	6990	10900	1160
31	1690	---	1480	2260	---	2680	---	1690	---	5750	9210	---
TOTAL	49550	43260	59980	151720	370070	118940	51290	57130	46556	81080	206790	62060
MEAN	1598	1442	1935	4894	13220	3837	1710	1843	1552	2615	6671	2069
MAX	2490	1700	3570	14200	20200	8780	2900	3290	3570	8790	16000	8390
MIN	1340	1340	1470	1460	3220	1900	1140	1190	922	1170	1300	1040
CFSM	.30	.27	.37	.93	2.52	.73	.33	.35	.30	.50	1.27	.39
IN.	.35	.31	.42	1.07	2.62	.84	.36	.40	.33	.57	1.46	.44

CAL YR 1984 TOTAL 2836890 MEAN 7751 MAX 28700 MIN 1340 CFSM 1.47 IN. 20.08
WTR YR 1985 TOTAL 1298426 MEAN 3557 MAX 20200 MIN 922 CFSM .68 IN. 9.19

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1984.
WATER TEMPERATURE: January 1973 to September 1984.

INSTRUMENTATION.--Water-quality monitor from May 1973 to September 1984.

REMARKS.--Station operated as part of NASQAN network from January 1973 to present. Daily records of specific conductance for period October 1956 to September 1961 are available in the district office in Raleigh, NC. During period 1956-73, data were collected at bridge on State Highway 11 located 2 mi downstream and published as Cape Fear River near Acme (station 02105771).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1973-84): Maximum, 317 microsiemens Oct. 19, 20, 1976; minimum, 40 microsiemens June 26, 1973.
WATER TEMPERATURE (water years 1973-84): Maximum, 32.0°C July 9, 19, 20, 21, 1977, Aug. 10, 1979; minimum, 0.5°C Jan. 24, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT 25...	1125	1510	130	5.9	22.5	5.7	773	7.4	84	K20	K4	20
FEB 20...	1050	7600	80	6.1	5.0	20	768	12.2	95	820	K60	20
MAY 14...	1045	1400	120	6.2	23.0	5.0	760	7.3	85	<4	K12	21
JUL 31...	1045	5820	90	5.8	26.0	20	763	7.3	90	K900	170	17

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 25...	0	4.6	2.1	16	60	2	2.7	18	13	.20	7.3	82
FEB 20...	7	4.7	2.0	6.8	40	.7	2.0	11	7.5	<.10	7.5	69
MAY 14...	0	4.7	2.2	15	58	1	2.5	16	11	.10	4.6	76
JUL 31...	0	4.0	1.6	8.0	47	.9	2.4	11	7.9	.20	6.8	69

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
OCT 25...	78	.11	335	.89	.310	.40	.60	.210	.190	.160	.49
FEB 20...	50	.09	1420	.52	.230	.30	1.0	.070	.060	.060	.18
MAY 14...	70	.10	287	.64	.280	.36	.50	.240	.210	.190	.58
JUL 31...	60	.09	1080	.47	.260	.33	.60	.220	.110	.100	.31

K Results based on colony count outside the acceptable range (non-ideal colony count).

CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
OCT 25...	100	<1	28	<.5	<1	2	<3	3	500	2	<4
FEB 20...	110	<1	28	<.5	<1	<1	<3	2	160	1	<4
MAY 14...	30	<1	27	<.5	<1	6	<3	3	400	4	<4
JUL 31...	200	1	32	<.5	2	4	<3	4	460	5	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)
OCT 25...	110	.3	<10	3	<1	<1	42	<6	5	<1.7
FEB 20...	54	<.1	<10	1	<1	<1	39	<6	11	--
MAY 14...	120	.2	<10	1	<1	<1	42	<6	17	--
JUL 31...	71	.3	<10	7	<1	<1	32	<6	34	--

DATE	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. %FINER THAN .062 MM
OCT 25...	<.4	4.2	<.4	3.6	<.4	.14	.03	9	37	60
FEB 20...	--	--	--	--	--	--	--	21	431	86
MAY 14...	--	--	--	--	--	--	--	11	42	89
JUL 31...	--	--	--	--	--	--	--	27	424	94

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/18	1415	WATER	0	15.37	1430	104	6.36	21.0	5.3	7.2	10K
84/11/27	1440	WATER	0	15.33	1380	109	6.29	15.0	3.6	8.7	10K
84/12/10	1440	WATER	0	16.22	2890	126	6.76	12.0	2.6	9.9	20
85/01/29	1300	WATER	0	15.74	1910	70	6.60	5.0		12.2	20
85/02/13	1220	WATER	0	20.36	19300	76	6.70	6.0		11.6	70
85/03/28	1200	WATER	0	16.97	4730	75	6.94	17.0	8.3	8.2	10
85/04/23	1200	WATER	0	15.48	1500	103	7.02	21.0		7.6	10
85/05/28	1120	WATER	0	16.38	3240	122	6.92	25.0		6.8	10K
85/06/24	1200	WATER	0	15.20	1230	112	6.91	25.0	5.8	7.8	10K
85/07/23	1057	WATER	0	15.24	1260	123	6.84	27.0		6.8	
85/08/26	1135	WATER	0.15	18.35	9560	62	6.31	25.0		6.2	20
85/09/26	0910	WATER	0.1	15.16	1170	102	6.87	24.0	12.0	6.8	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/18	1415	WATER	0	13	3	100	.59	.170	.500	.190	.090
84/11/27	1440	WATER	0	14	2	96	.73	.230	.700	.280	.170
84/12/10	1440	WATER	0	16	14	190	.67	.230	.600	.240	.170
85/01/29	1300	WATER	0	15	6	83					
85/02/13	1220	WATER	0	18	28	140					
85/03/28	1200	WATER	0	17	14	98	.47	.160	.400	.160	.070
85/04/23	1200	WATER	0	21	7	90					
85/05/28	1120	WATER	0	24	6	92					
85/06/24	1200	WATER	0	19	7	100	.77	.300	.700	.360	.210
85/07/23	1057	WATER	0	20	7	110					
85/08/26	1135	WATER	0.15	16	23	170					
85/09/26	0910	WATER	0.1	22			.88	.220	.400	.300	.180

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/10	1440	WATER	0	10K	20K	50K	20K	100K	1.1	100K	20K
85/03/28	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/24	1200	WATER	0	10K	20K	50K	20	100K	1.1	100K	20K
85/08/26	1135	WATER	0.15						.2K		
85/09/26	0910	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

02106000 LITTLE COHARIE CREEK NEAR ROSEBORO, NC

LOCATION.--Lat 34°57'13", long 78°29'17", Sampson County, Hydrologic Unit 03030006, on downstream end of center pier of bridge on State Highway 24, 1.2 mi east of Roseboro, and 1.5 mi upstream from Bearskin Swamp.

DRAINAGE AREA.--92.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1950 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 80.52 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 12, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--35 years, 118 ft^3/s, 17.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft^3/s Oct. 7, 1964; maximum gage height, 10.34 ft Sept. 15, 1984; minimum, 0.1 ft^3/s Sept. 13, 14, 27, Oct. 1-11, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD..--Flood in 1924 reached a stage of 11.6 ft, from information by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 605 ft^3/s Feb. 9, gage height, 7.19 ft; minimum, 3.5 ft^3/s June 29 and July 22, gage height, 1.44 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	68	69	41	144	e160	80	20	9.9	21	298	27
2	165	64	69	41	174	e150	71	19	9.3	24	243	23
3	170	60	70	69	225	e140	64	23	8.2	18	237	20
4	177	57	68	132	264	e135	59	43	7.2	12	208	18
5	180	56	75	193	304	e130	55	47	6.6	9.3	205	16
6	173	56	95	280	408	e125	52	36	12	14	166	15
7	159	54	96	343	454	e120	50	27	13	13	92	14
8	143	52	102	334	545	e118	48	22	27	9.5	87	13
9	125	48	104	285	598	e114	45	20	26	7.8	162	12
10	109	46	100	238	505	e110	40	21	18	6.0	134	11
11	97	44	91	218	e380	e105	37	23	13	6.3	96	11
12	87	44	80	196	e420	e100	37	24	9.7	8.0	65	10
13	79	42	72	177	e460	e94	38	23	8.2	9.8	48	9.6
14	72	41	66	163	e500	e92	38	20	6.9	7.6	38	9.0
15	66	39	62	152	e450	e90	40	18	6.2	5.6	32	8.4
16	62	38	59	140	e440	e86	71	18	8.1	8.3	28	8.2
17	60	37	57	137	e400	e80	190	21	55	18	23	7.9
18	61	37	55	148	e360	e78	184	20	49	12	37	7.5
19	64	37	53	150	e335	74	144	17	28	7.2	53	7.2
20	72	39	52	154	e305	71	94	15	19	4.9	52	6.9
21	72	38	51	e150	e280	67	64	16	14	4.1	41	6.8
22	67	37	50	e140	e260	88	50	18	11	9.7	37	7.6
23	67	37	50	e130	e250	112	43	40	9.2	28	34	9.6
24	68	37	48	e120	e220	130	37	47	7.8	22	28	9.9
25	68	37	47	123	e210	143	33	38	6.7	89	55	9.4
26	66	37	45	129	e190	151	29	27	5.8	157	147	16
27	63	37	44	126	e180	145	26	21	5.0	151	106	23
28	61	42	42	124	e170	126	24	17	4.2	136	54	18
29	70	63	42	126	---	109	22	14	3.9	251	40	14
30	70	65	41	117	---	96	21	12	4.7	435	33	11
31	70	---	41	122	---	87	---	11	---	388	30	---
TOTAL	3021	1389	1998	4998	9431	3426	1786	738	412.6	1893.1	2909	380.0
MEAN	97.5	46.3	64.5	161	337	111	59.5	23.8	13.8	61.1	93.8	12.7
MAX	180	68	104	343	598	160	190	47	55	435	298	27
MIN	60	37	41	41	144	67	21	11	3.9	4.1	23	6.8
CFSM	1.05	.50	.70	1.73	3.63	1.20	.64	.26	.15	.66	1.01	.14
IN.	1.21	.56	.80	2.00	3.78	1.37	.72	.30	.17	.76	1.17	.15

CAL YR 1984 TOTAL 69312.9 MEAN 189 MAX 2570 MIN 7.4 CFSM 2.04 IN. 27.78
WTR YR 1985 TOTAL 32381.7 MEAN 88.7 MAX 598 MIN 3.9 CFSM .96 IN. 12.98

e Estimated

02106000 LITTLE COHARIE CREEK NEAR ROSEBORO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/18	1140	WATER	0	4.02	61	48	5.80	20.0		7.0	30
84/11/27	1130	WATER	0	3.33	37	56	5.78	15.0		9.4	20
84/12/10	1200	WATER	0	4.83	100	48	5.98	11.0	2.5	10.8	20
85/01/29	1000	WATER	0	5.26	127	65	7.00	3.0		10.4	40
85/02/13	0900	WATER	0	6.87	443	49	5.34	5.0		9.4	50
85/03/27	0900	WATER	0	5.51	147	55	5.87	14.0	2.7	7.4	10
85/04/23	0845	WATER	0	3.45	44	60	6.32	21.0		6.6	20
85/05/28	0750	WATER	0	2.40	18	13	6.45	21.0		6.8	120
85/06/24	0800	WATER	0	1.81	8	83	6.57	23.0	3.5	6.4	40
85/07/23	0745	WATER	0	2.97	30	104	5.74	24.0		6.0	
85/08/26	0815	WATER	0.15	5.59	152	52	5.53	23.0		5.0	1200
85/09/24	0830	WATER	0.1	1.85	10	62	6.55	25.0	2.9	6.8	80

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/18	1140	WATER	0	4	3	87					
84/11/27	1130	WATER	0	6	1	57					
84/12/10	1200	WATER	0	4	2	73	.18	.060	.500	.050	.020
85/01/29	1000	WATER	0	11	2	55					
85/02/13	0900	WATER	0	4	3	76					
85/03/27	0900	WATER	0	6	2	55	.24	.020	.300	.050	.010
85/04/23	0845	WATER	0	10	10	97					
85/05/28	0750	WATER	0	0	8	75					
85/06/24	0800	WATER	0	15	4	110	.43	.120	.700	.210	.100
85/07/23	0745	WATER	0	10	13	170					
85/08/26	0815	WATER	0.15	7	10	150					
85/09/24	0830	WATER	0.1	13	6	74	.32	.070	.400	.140	.090

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/10	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/27	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/24	0800	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/24	0830	WATER	0.1	10	20K	50K	20K	100K	.7	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

02106500 BLACK RIVER NEAR TOMAHAWK, NC

LOCATION.--Lat 34°45'17", long 78°17'21", Sampson County, Hydrologic Unit 03030006, on left bank 30 ft upstream from bridge on State Highway 411, 0.2 mi downstream from Clear Run Swamp, and 3.8 mi northeast of Tomahawk.

DRAINAGE AREA.--676 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1723: 1955(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.61 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1951 to June 29, 1961, nonrecording gage on downstream side of bridge. June 30, 1961 to Sept. 30, 1964, water-stage recorder at present site at datum 25.00 ft lower.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--34 years, 794 ft³/s, 15.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s Sept. 17, 1984, gage height, 22.08 ft; minimum, 8.5 ft³/s Oct. 13, 1954, gage height, 0.59 ft, present site and datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 22.0 ft, present datum, discharge, 14,500 ft³/s and floods in 1945 and 1948 reached a stage of 17.6 ft, present datum, discharge, 5,420 ft³/s, from information furnished by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,760 ft³/s Feb. 16, gage height, 13.30 ft; minimum, 25 ft³/s July 11, 12, gage height, 1.29 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1160	423	450	288	820	1100	553	206	135	35	969	267
2	1180	407	429	288	970	1040	495	198	127	35	1010	221
3	1160	394	416	331	1130	998	448	193	109	45	1120	188
4	1080	381	440	612	1250	966	416	211	97	50	1210	162
5	973	372	456	816	1340	927	390	238	90	46	1150	143
6	876	373	537	868	1550	876	370	268	95	38	945	127
7	798	359	612	875	1760	816	353	261	104	33	702	113
8	745	337	593	890	1960	762	337	231	159	31	671	103
9	703	321	547	918	2150	717	320	211	277	32	1310	95
10	658	312	505	938	2290	677	301	204	221	29	1440	87
11	608	306	479	1010	2380	642	289	200	166	26	1250	87
12	554	299	466	1110	2500	616	285	209	133	38	904	80
13	504	289	457	1130	2560	592	279	235	105	59	641	73
14	464	280	440	1060	2600	567	281	239	89	53	454	68
15	432	272	415	946	2640	543	296	233	79	82	337	63
16	407	266	393	819	2730	519	316	213	76	74	269	59
17	409	263	378	734	2740	508	378	208	101	56	232	57
18	484	257	365	796	2610	514	566	201	186	60	405	54
19	453	255	356	860	2370	507	675	189	204	77	646	51
20	424	253	346	843	2080	480	757	178	169	62	803	51
21	406	260	340	791	1850	459	752	177	130	47	829	48
22	388	258	337	702	1720	515	616	184	99	38	778	48
23	369	253	332	620	1620	801	446	372	81	51	613	50
24	354	251	324	611	1540	926	356	581	69	196	496	60
25	345	249	319	593	1450	938	309	430	60	446	425	63
26	338	249	313	587	1340	877	280	317	54	691	380	58
27	336	248	306	574	1260	794	256	256	48	753	438	92
28	336	252	301	550	1190	747	243	218	43	816	418	163
29	364	328	297	563	---	706	231	180	39	885	415	141
30	452	442	293	598	---	655	217	154	35	964	346	100
31	462	---	291	635	---	605	---	143	---	1010	310	---
TOTAL	18222	9209	12533	22956	52400	22390	11811	7338	3380	6858	21916	2980
MEAN	588	307	404	741	1871	722	394	237	113	221	707	99.3
MAX	1180	442	612	1130	2740	1100	757	581	277	1010	1440	267
MIN	336	248	291	288	820	459	217	143	35	26	232	48
CFSM	.87	.45	.60	1.10	2.77	1.07	.58	.35	.17	.33	1.05	.15
IN.	1.00	.51	.69	1.26	2.88	1.23	.65	.40	.19	.38	1.21	.16

CAL YR 1984 TOTAL 400148 MEAN 1093 MAX 17000 MIN 81 CFSM 1.62 IN. 22.02
WTR YR 1985 TOTAL 191993 MEAN 526 MAX 2740 MIN 26 CFSM .78 IN. 10.57

02106500 BLACK RIVER NEAR TOMAHAWK, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/18	1310	WATER	0	4.81	484	72	5.89	21.0		6.9	570
84/11/27	1330	WATER	0	3.31	247	78	6.34	15.0		8.8	
84/12/10	1330	WATER	0	4.98	503	72	6.43	10.0	2.2	11.0	100
85/01/29	1130	WATER	0	5.32	958	71	7.10	4.0		12.0	20
85/02/13	1045	WATER	0	12.78	2560	52	5.64	6.0		10.0	280
85/03/27	1120	WATER	0	6.67	794	60	6.65	15.0	3.0	8.6	30
85/04/23	1015	WATER	0	4.48	454	77	6.68	20.0		7.0	10
85/05/28	0940	WATER	0	2.64	224	97	6.77	21.0		7.0	60
85/06/24	1000	WATER	0	1.72	69	102	6.96	24.0	2.7	6.8	50
85/07/23	0915	WATER	0	1.51	39	137	6.34	25.0		6.2	
85/08/26	0940	WATER	0.15	3.85	358	87	6.28	24.0		6.4	100
85/09/24	1020	WATER	0.1	1.71	59	92	7.18	27.0	2.1	7.4	30

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/18	1310	WATER	0	6	8	93					
84/11/27	1330	WATER	0	12	1	68					
84/12/10	1330	WATER	0	9	1	87	.51	.090	.400	.090	.050
85/01/29	1130	WATER	0	11	2	74					
85/02/13	1045	WATER	0	4	6	91					
85/03/27	1120	WATER	0	11	5	68	.69	.070	.400	.110	.040
85/04/23	1015	WATER	0	15	10	120					
85/05/28	0940	WATER	0	17	7	87					
85/06/24	1000	WATER	0	20	6	100	.68	.030	.400	.240	.130
85/07/23	0915	WATER	0	27	6	120					
85/08/26	0940	WATER	0.15	14	74	190					
85/09/24	1020	WATER	0.1	27	4		.57	.030	.200	.180	.090

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/10	1330	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/27	1120	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/24	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/24	1020	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02107000 SOUTH RIVER NEAR PARKERSBURG, NC

LOCATION.--Lat 34°48'45", long 78°27'26", Bladen County, Hydrologic Unit 03030006, near center of span on downstream side of bridge on Secondary Road 1503, 1.9 mi southwest of Parkersburg, and 2.1 mi upstream from Cypress Creek.

DRAINAGE AREA.--379 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 50.38 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 13, 1961, nonrecording gage at present site at datum 50.00 ft lower.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--34 years, 423 ft^3/s, 15.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft^3/s Oct. 10, 1964, gage height, 14.32 ft; minimum, 0.1 ft^3/s Oct. 3-6, 11-14, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1918 or 1928 reached a stage of 15.88 ft, present datum, from high-water mark witnessed by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,940 ft^3/s Feb. 12, gage height, 11.22 ft; minimum, 7.3 ft^3/s Sept. 21, 22, gage height, 2.49 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	418	163	130	141	398	613	338	72	33	11	643	101
2	392	156	125	140	457	585	314	64	26	12	816	82
3	366	150	129	160	516	572	293	60	21	39	803	68
4	345	143	136	227	566	566	275	63	18	107	718	58
5	332	138	144	288	648	553	257	68	16	158	636	50
6	329	139	170	342	857	527	241	80	29	192	577	43
7	331	136	192	421	1090	491	226	86	54	183	540	36
8	328	131	200	543	1270	456	211	80	94	131	527	31
9	314	127	205	690	1520	427	196	72	142	91	538	26
10	291	123	212	826	1790	399	181	64	129	67	541	23
11	269	118	219	868	1830	373	167	59	93	51	522	20
12	250	113	222	844	1900	351	156	56	69	39	438	17
13	235	108	222	803	1810	332	148	54	51	35	327	15
14	219	102	223	748	1720	315	142	51	37	33	246	13
15	202	98	224	698	1650	301	139	46	27	32	180	12
16	185	95	226	653	1620	286	137	47	24	29	133	11
17	171	91	228	625	1540	274	158	56	45	25	110	10
18	160	87	228	601	1420	263	224	54	61	22	108	9.7
19	152	85	226	573	1280	251	300	50	83	19	113	8.8
20	144	86	221	545	1180	239	332	47	104	16	110	8.0
21	137	88	216	510	1100	230	343	48	96	14	115	7.4
22	131	86	210	479	1010	241	320	47	80	12	123	7.3
23	127	83	203	455	940	274	265	58	63	24	119	8.3
24	128	83	196	429	873	295	215	57	48	65	103	8.8
25	132	82	189	409	810	313	175	77	35	81	100	8.2
26	135	82	180	387	747	357	143	88	25	177	234	8.1
27	139	81	169	365	689	412	120	84	20	223	324	12
28	142	84	160	347	649	438	103	76	16	253	320	15
29	150	110	152	346	---	427	90	63	13	305	241	11
30	158	131	146	348	---	396	80	52	11	399	166	9.6
31	166	---	142	362	---	364	---	41	---	508	126	---
TOTAL	6978	3299	5845	15173	31880	11921	6289	1920	1563	3353	10597	738.2
MEAN	225	110	189	489	1139	385	210	61.9	52.1	108	342	24.6
MAX	418	163	228	868	1900	613	343	88	142	508	816	101
MIN	127	81	125	140	398	230	80	41	11	11	100	7.3
CFSM	.59	.29	.50	1.29	3.01	1.02	.55	.16	.14	.28	.90	.06
IN.	.68	.32	.57	1.49	3.13	1.17	.62	.19	.15	.33	1.04	.07

CAL YR 1984 TOTAL 211565 MEAN 578 MAX 3450 MIN 30 CFSM 1.53 IN. 20.77
WTR YR 1985 TOTAL 99556.2 MEAN 273 MAX 1900 MIN 7.3 CFSM .72 IN. 9.77

02107000 SOUTH RIVER NEAR PARKERSBURG, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/18	1240	WATER	0	6.22	159	52	5.35	20.0		7.1	10K
84/11/27	1250	WATER	0	5.00	81	52	5.42	14.0		9.0	10K
84/12/10	1250	WATER	0	6.91	212	50	5.68	11.0	3.0	10.4	20
85/01/29	1045	WATER	0	7.89	345	65	5.60	3.0		11.4	20
85/02/13	0950	WATER	0	11.10	1810	42	5.12	5.0		9.2	40
85/03/27	1015	WATER	0	8.18	408	49	5.72	14.0	3.1	7.8	300
85/04/23	0925	WATER	0	7.21	270	55	5.79	20.0		10.4	20
85/05/28	0845	WATER	0	4.62	77	59	6.01	21.0		7.0	110
85/06/24	0850	WATER	0	3.92	50	61	5.85	24.0	2.9	6.4	10
85/07/23	0830	WATER	0	2.73	14	61	5.92	25.0		6.4	
85/08/26	0900	WATER	0.15	6.57	224	46	4.96	26.0		6.0	400
85/09/24	0925	WATER	0.1	2.59	9	38	5.94	26.0	2.1	6.6	40

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/18	1240	WATER	0	4	3	92					
84/11/27	1250	WATER	0	3	1K	65					
84/12/10	1250	WATER	0	4	1	87	.12	.030	.300	.040	.010
85/01/29	1045	WATER	0	5	3	56					
85/02/13	0950	WATER	0	3	2	75					
85/03/27	1015	WATER	0	6	2	68	.10	.010	.400	.050	.010
85/04/23	0925	WATER	0	6	8	87					
85/05/28	0845	WATER	0	9	10	76					
85/06/24	0850	WATER	0	6	5	90	.31	.050	.500	.090	.900
85/07/23	0830	WATER	0	9	7	110					
85/08/26	0900	WATER	0.15	2	8	180					
85/09/24	0925	WATER	0.1	7	1	76	.17	.060	.300	.090	.030

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/10	1250	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/27	1015	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/24	0850	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/24	0925	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

CAPE FEAR RIVER BASIN

0210782005 MAHUNGA CREEK AT SECONDARY ROAD 1301 NEAR WARSAW, NC

LOCATION.--Lat 35°01'36", long 78°00'41", Duplin County, Hydrologic Unit 03030007, on downstream side of bridge on Secondary Road 1301, 0.1 mi upstream from King Branch, 4.7 mi northeast of Warsaw.

DRAINAGE AREA.--8.28 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 577 ft^3/s Sept. 14, 1984, gage height, 94.68 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	1800	158	93.14	Aug. 19	0500	*179	*93.26

No flow several days in May, June, July, and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	2.3	2.8	1.7	13	7.7	5.8	.36	.00	.00	.95	1.4
2	10	2.3	2.5	1.7	18	8.8	5.2	.32	.00	.00	16	1.2
3	6.4	1.9	3.7	4.2	31	7.8	4.9	.60	.00	.00	2.9	.98
4	5.0	2.0	3.7	11	13	7.3	4.7	.91	.00	.00	1.0	.79
5	4.1	2.7	4.2	7.5	14	7.3	4.2	.58	.00	.00	.48	.52
6	3.7	2.3	7.0	4.8	67	6.7	4.6	.40	.00	.00	.30	.33
7	3.5	1.7	4.5	3.9	52	6.3	4.1	.25	.00	.00	.12	.25
8	3.3	1.6	3.8	3.5	25	6.4	3.6	.17	4.5	.00	.26	.20
9	3.0	1.5	3.5	3.0	15	6.4	3.4	.33	1.7	.00	1.1	.16
10	3.0	1.6	3.4	3.4	11	6.1	3.2	.45	.51	.00	.75	.14
11	2.5	1.6	3.4	5.6	9.9	5.9	3.3	.37	.19	.00	.68	.16
12	2.2	1.6	3.2	4.2	92	6.0	3.2	.42	.06	.00	.34	.09
13	2.3	1.4	3.1	3.5	81	5.7	3.1	.39	.01	.00	.24	.05
14	1.9	1.4	2.9	3.3	32	5.6	3.7	.24	.00	.00	.17	.00
15	1.7	1.3	2.8	3.0	19	5.4	3.6	.16	.00	.00	.11	.00
16	1.7	1.4	2.7	2.7	14	5.1	3.5	.16	.00	.00	.07	.00
17	1.8	1.4	2.7	4.4	11	8.2	5.1	.14	.00	.00	.68	.00
18	2.0	1.4	2.6	7.5	10	7.1	3.3	.08	.00	.00	20	.00
19	2.0	1.5	2.5	5.1	9.2	5.8	2.5	.01	.00	.00	112	.00
20	1.9	1.6	2.4	4.2	13	5.5	1.9	.00	.00	.00	13	.00
21	1.7	1.6	2.3	4.1	17	5.5	1.5	.00	.00	.00	4.4	.00
22	1.6	1.7	2.4	4.1	12	15	1.3	.70	.00	.00	29	.10
23	1.7	1.7	2.1	4.0	10	18	1.1	5.1	.00	.00	11	1.0
24	1.7	1.8	1.9	3.8	9.7	10	.85	1.4	.00	.00	3.7	.62
25	1.5	1.8	1.9	3.6	9.0	21	.84	.86	.00	.00	2.7	.52
26	1.6	1.8	1.7	3.1	8.6	14	.69	.47	.00	.00	3.1	.73
27	1.6	1.8	1.7	2.6	8.6	10	.60	.22	.00	.00	2.0	6.0
28	1.7	2.4	1.8	2.8	8.3	8.9	.56	.09	.00	.12	4.0	2.3
29	3.9	6.0	1.8	3.9	---	7.9	.47	.01	.00	1.8	2.9	1.3
30	3.1	3.5	1.8	3.3	---	7.1	.39	.00	.00	1.6	2.0	1.1
31	2.5	---	1.7	7.0	---	6.4	---	.00	---	.56	1.8	---
TOTAL	93.4	58.6	88.5	130.5	633.3	254.9	85.20	15.19	6.97	4.08	237.75	19.94
MEAN	3.01	1.95	2.85	4.21	22.6	8.22	2.84	.49	.23	.13	7.67	.66
MAX	10	6.0	7.0	11	92	21	5.8	5.1	4.5	1.8	112	6.0
MIN	1.5	1.3	1.7	1.7	8.3	5.1	.39	.00	.00	.00	.07	.00
CFSM	.36	.23	.34	.51	2.72	.99	.34	.06	.03	.02	.92	.08
IN.	.42	.26	.40	.58	2.84	1.14	.38	.07	.03	.02	1.07	.09

CAL YR 1984 TOTAL 3588.61 MEAN 9.80 MAX 387 MIN .00 CFSM 1.18 IN. 16.08
WTR YR 1985 TOTAL 1628.33 MEAN 4.46 MAX 112 MIN .00 CFSM .54 IN. 7.30

0210782005 NAHUNGA CREEK AT SECONDARY ROAD 1301 NEAR WARSAW, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to current year.
WATER TEMPERATURE: October 1983 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1983.

REMARKS.--No flow May 19-21, 29-31, June 1-7, 14-30, July 1-28, Sept. 14-22. Station operated to define stream quantity and quality as part of the Grove Creek project.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 183 microsiemens Aug. 16; minimum, 46 microsiemens May 22, Aug. 18.
WATER TEMPERATURE: Maximum, 26.0°C June 11; minimum, 0.5°C Jan. 21, 22, 23, 24, 27.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	BAROMETRIC PRESSURE (MM OF HG)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT											
24...	1115	2.0	80	5.7	20.0	769	6.0	5.7	1.7	K24	220
DEC											
18...	1015	2.7	76	5.7	12.0	765	5.5	7.7	1.1	K36	K300
FEB											
01...	0915	14	70	5.4	8.0	755	8.0	9.2	1.3	200	5100
13...	0910	90	70	5.5	4.0	755	15	10.0	1.6	240	2100
21...	1310	15	78	6.0	7.5	775	7.3	10.5	1.2	300	2500
MAR											
11...	0930	3.6	78	6.0	10.0	765	6.0	9.3	1.1	K100	270
18...	0930	7.3	76	5.8	10.0	760	7.0	9.3	1.2	--	--
APR											
05...	0940	5.0	71	6.4	15.5	760	5.9	9.4	1.0	K120	400
24...	1000	.92	71	5.3	19.0	759	5.7	7.0	1.3	170	360
MAY											
13...	1050	.40	65	5.7	20.0	761	6.2	6.6	1.4	410	760
JUN											
10...	1015	.57	93	5.6	24.5	758	13	6.2	1.6	280	1100
AUG											
02...	1000	26	120	5.2	22.5	760	13	6.2	1.5	--	--
05...	1100	.60	125	5.6	20.5	765	8.0	7.1	1.4	250	1000
27...	0940	2.1	82	6.3	23.0	768	6.2	7.5	1.4	K180	960
SEP											
04...	0900	.80	80	6.4	23.5	760	5.0	6.6	1.7	200	800
10...	1000	.14	80	6.3	24.0	760	4.8	6.6	1.8	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

0210782005 MANUNGA CREEK AT SECONDARY ROAD 1301 NEAR WARSAW, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT											
24...	3.8	2.3	4.9	12	46	.06	.25	.38	.020	.40	.020
DEC											
18...	4.5	1.9	5.3	16	56	.08	.41	--	<.010	.40	.180
FEB											
01...	3.8	2.3	6.9	11	73	.10	2.8	.79	.010	.80	.040
13...	3.4	3.0	7.4	9.5	64	.09	16	1.7	.020	1.7	.020
21...	4.3	2.0	7.0	12	58	.08	2.3	3.6	.100	3.7	.110
MAR											
11...	--	--	--	--	--	--	--	1.1	.010	1.1	.070
18...	4.4	1.8	5.9	12	65	.09	1.3	.81	.010	.82	.100
APR											
05...	4.3	1.7	5.4	12	56	.08	.76	--	<.010	.70	.050
24...	4.0	1.5	4.5	11	41	.06	.10	1.6	.020	1.6	.100
MAY											
13...	3.3	1.5	4.4	8.6	34	.05	.04	.58	.020	.60	.150
JUN											
10...	5.2	2.7	16	13	67	.09	.10	.48	.020	.50	.160
AUG											
02...	7.7	2.6	25	12	91	.12	6.4	--	<.010	.70	<.010
05...	8.7	2.7	30	12	97	.13	.16	--	<.010	.30	.070
27...	4.7	2.5	8.1	9.8	72	.10	.41	--	<.010	.40	.070
SEP											
04...	5.1	2.3	8.2	11	72	.10	.16	.19	.010	.20	.050
10...	4.3	2.8	6.7	12	66	.09	.02	--	<.010	.20	.110

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT											
24...	.60	.70	1.1	4.9	.080	.25	.070	.060	9.3	7	.04
DEC											
18...	.92	1.1	1.5	6.6	.080	.25	.030	.040	7.4	4	.03
FEB											
01...	.26	.30	1.1	4.9	.090	.28	.030	.030	10	5	.19
13...	.48	.50	2.2	9.7	.080	.25	.030	.030	12	10	2.4
21...	.49	.60	4.3	19	.060	.18	<.010	--	6.9	2	.08
MAR											
11...	.63	.70	1.8	8.0	.020	.06	<.010	.010	6.8	6	.06
18...	.70	.80	1.6	7.2	--	--	--	--	5.5	6	.12
APR											
05...	.35	.40	1.1	4.9	.050	.15	<.010	.020	7.0	5	.07
24...	.70	.80	2.4	11	.100	.31	.100	.100	6.7	8	.02
MAY											
13...	.35	.50	1.1	4.9	.110	.34	.120	.110	8.3	10	.01
JUN											
10...	.44	.60	1.1	4.9	--	--	.140	.130	8.9	8	.01
AUG											
02...	--	.60	1.3	5.8	.090	.28	.030	.050	15	14	.98
05...	.73	.80	1.1	4.9	.020	.06	<.010	.020	8.5	2	.00
27...	.53	.60	1.0	4.4	.060	.18	.050	.020	12	4	.02
SEP											
04...	.45	.50	.70	3.1	.090	.28	--	.070	10	3	.00
10...	.59	.70	.90	4.0	.110	.34	.080	.040	13	4	.00

0210782005 NAHUNGA CREEK AT SECONDARY ROAD 1301 NEAR WARSAW, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	78	71	74	85	83	84	86	80	82	75	71	74
2	81	75	78	85	82	84	81	79	80	75	72	74
3	83	80	81	85	84	84	78	73	76	75	66	70
4	84	80	82	84	80	82	80	77	79	71	67	69
5	83	80	82	83	80	82	80	69	75	80	71	76
6	82	77	80	83	81	82	78	72	76	83	81	82
7	81	78	80	83	82	83	78	77	78	83	81	82
8	81	77	79	83	81	82	80	78	79	82	81	81
9	81	78	79	82	80	81	80	77	78	81	80	81
10	81	75	78	82	80	82	79	78	79	81	72	78
11	78	74	76	82	80	81	78	86	77	76	73	74
12	79	78	79	82	81	81	78	77	78	79	75	78
13	85	80	82	81	80	81	78	75	77	80	79	80
14	83	79	81	81	80	80	78	75	77	80	79	80
15	82	78	81	81	80	80	78	76	77	80	79	80
16	82	79	81	81	80	80	77	76	77	80	78	79
17	82	80	81	81	79	80	78	74	76	78	69	74
18	82	79	81	80	79	79	78	74	76	76	70	72
19	83	81	82	81	79	80	78	74	76	80	77	78
20	85	82	83	81	78	79	77	76	76	80	79	79
21	86	82	84	79	78	78	77	74	75	83	79	82
22	85	82	84	79	77	78	76	75	75	85	81	83
23	84	82	83	79	77	78	76	74	75	83	78	81
24	86	83	85	79	78	78	76	74	75	79	76	78
25	86	82	84	79	78	78	75	73	75	79	77	78
26	85	82	84	79	77	78	76	75	75	78	77	78
27	84	82	83	79	78	78	76	73	74	78	76	77
28	84	82	83	80	77	78	74	71	73	83	75	77
29	86	77	81	96	78	91	75	73	74	76	73	74
30	89	86	87	95	84	88	76	72	74	75	73	74
31	87	84	85	---	---	---	77	73	75	80	60	68
MONTH	89	71	81	96	77	81	86	69	76	85	60	77

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	78	65	72	80	77	79	---	---	---	105	69	80
2	78	62	68	80	77	78	---	---	---	78	69	72
3	83	68	78	81	79	80	---	---	---	79	68	73
4	85	83	84	81	80	80	---	---	---	93	67	77
5	84	66	77	81	77	79	72	69	71	86	73	78
6	79	63	69	81	79	80	73	70	71	83	74	78
7	83	79	81	79	78	79	73	70	72	85	72	79
8	84	83	84	80	78	79	74	71	72	79	72	76
9	84	82	83	80	79	80	73	71	71	73	65	69
10	83	82	82	79	78	79	72	71	71	67	63	65
11	82	81	82	79	78	79	73	71	72	68	66	67
12	79	55	61	80	77	79	73	71	72	67	64	65
13	76	63	72	80	78	79	73	71	72	66	64	65
14	79	77	78	79	77	79	72	71	71	66	62	64
15	80	79	79	80	78	79	73	71	72	64	61	62
16	81	79	80	79	78	78	73	67	71	63	59	61
17	81	79	80	79	73	76	72	70	71	60	57	59
18	81	80	80	77	76	77	72	70	72	61	57	59
19	81	80	81	78	76	77	73	70	72	---	---	---
20	81	74	77	77	76	77	74	71	73	---	---	---
21	81	75	79	77	76	77	74	71	73	---	---	---
22	83	81	82	76	59	66	73	70	72	74	46	55
23	83	81	82	72	64	69	73	71	72	103	59	94
24	82	79	82	74	72	73	73	71	72	94	78	85
25	82	79	81	71	58	63	73	70	71	76	69	72
26	80	78	79	77	69	74	72	70	71	69	63	66
27	80	77	79	76	74	76	73	70	71	63	58	60
28	80	79	80	---	---	---	75	72	73	62	58	60
29	---	---	---	---	---	---	82	67	72	---	---	---
30	---	---	---	---	---	---	109	67	80	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	85	55	78	81	58	77	109	67	72	105	46	70

CAPE FEAR RIVER BASIN

0210782005 MAHUNGA CREEK AT SECONDARY ROAD 1301 NEAR WARSAW, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	160	108	148	92	71	81
2	---	---	---	---	---	---	133	87	122	87	67	74
3	---	---	---	---	---	---	133	132	132	102	83	93
4	---	---	---	---	---	---	132	128	129	93	80	87
5	---	---	---	---	---	---	130	126	128	88	76	80
6	---	---	---	---	---	---	132	124	127	89	71	78
7	---	---	---	---	---	---	131	124	128	95	67	79
8	88	50	72	---	---	---	132	112	128	110	68	92
9	92	87	90	---	---	---	109	95	100	112	66	94
10	95	89	92	---	---	---	115	111	114	109	57	76
11	111	91	100	---	---	---	115	107	112	62	57	60
12	113	95	102	---	---	---	137	103	111	63	59	61
13	107	96	100	---	---	---	157	109	133	63	62	63
14	---	---	---	---	---	---	165	118	150	---	---	---
15	---	---	---	---	---	---	170	122	146	---	---	---
16	---	---	---	---	---	---	183	149	168	---	---	---
17	---	---	---	---	---	---	178	85	127	---	---	---
18	---	---	---	---	---	---	86	46	70	---	---	---
19	---	---	---	---	---	---	98	81	90	---	---	---
20	---	---	---	---	---	---	100	98	99	---	---	---
21	---	---	---	---	---	---	98	73	88	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	103	82	87	85	74	78
24	---	---	---	---	---	---	89	84	86	85	76	80
25	---	---	---	---	---	---	---	---	---	85	79	82
26	---	---	---	---	---	---	---	---	---	82	74	78
27	---	---	---	---	---	---	84	76	82	105	72	93
28	---	---	---	---	---	---	81	67	73	104	98	101
29	---	---	---	129	101	114	86	79	82	97	93	95
30	---	---	---	141	123	129	81	73	78	92	87	90
31	---	---	---	154	142	148	87	72	77	---	---	---
MONTH	113	50	93	154	101	130	183	46	111	112	57	82
YEAR	183	46	81									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.5	17.5	18.0	20.0	19.5	20.0	10.5	7.5	9.0	16.0	13.5	15.0
2	17.5	16.0	16.5	20.0	19.0	19.5	10.0	7.5	9.0	16.5	14.5	15.5
3	16.5	14.0	15.5	19.5	16.0	17.0	12.0	10.5	11.0	16.0	11.0	13.5
4	17.5	15.0	16.0	17.0	15.0	16.0	11.0	9.0	10.0	11.0	9.5	10.0
5	18.5	16.0	17.0	17.0	16.0	16.5	9.5	8.5	9.0	9.5	7.5	8.5
6	19.0	16.5	17.5	16.0	14.0	15.0	9.5	8.0	9.0	8.0	5.5	7.0
7	19.0	17.0	18.0	14.0	11.0	12.0	8.0	5.0	6.0	8.0	5.5	6.5
8	19.0	17.0	18.0	11.0	9.0	10.0	6.0	3.0	4.5	7.5	5.5	6.5
9	19.0	17.0	18.0	10.5	8.0	9.5	6.5	3.5	5.0	6.0	5.0	5.5
10	19.5	17.0	18.5	12.5	9.0	10.5	9.0	5.0	6.5	5.0	4.0	4.5
11	19.5	18.5	19.0	14.5	13.0	14.0	10.5	8.5	9.5	6.0	5.0	5.5
12	19.5	18.0	18.5	14.0	11.0	12.0	10.0	7.5	9.0	5.0	3.5	4.5
13	18.0	16.5	17.0	11.0	9.0	9.5	11.0	8.0	9.5	4.5	2.5	3.5
14	17.0	15.5	16.5	9.5	7.5	8.5	12.0	9.0	11.0	4.5	2.5	3.5
15	17.0	15.0	16.0	9.5	7.0	8.5	12.5	10.5	11.5	4.5	3.0	3.5
16	19.0	16.5	17.5	12.5	10.0	11.5	12.0	11.0	11.5	3.5	1.5	2.5
17	19.5	18.0	19.0	12.0	8.5	10.0	14.0	11.5	12.5	5.5	3.0	4.0
18	20.5	19.5	20.0	10.0	7.0	8.5	14.0	11.5	13.0	7.0	5.5	6.0
19	20.5	19.5	20.0	13.5	10.0	12.5	14.5	12.0	13.5	7.5	5.0	6.0
20	22.0	20.0	21.0	12.5	8.0	10.0	14.5	13.5	14.0	6.0	1.5	5.0
21	22.0	20.5	21.5	7.5	6.0	6.5	16.0	14.0	15.0	1.0	.5	.5
22	22.0	20.5	21.5	7.5	6.0	6.5	15.5	13.5	14.5	1.0	.5	.5
23	22.0	16.0	16.5	8.5	6.0	7.5	13.5	10.5	12.0	1.0	.5	.5
24	22.0	20.0	21.0	8.5	6.5	7.5	11.0	8.5	10.0	2.0	.5	1.0
25	20.5	19.5	20.0	8.5	6.0	7.5	13.5	11.0	12.0	4.5	1.0	3.0
26	20.5	19.5	20.0	9.0	6.5	7.5	11.5	9.5	10.5	3.5	1.5	2.5
27	20.5	18.5	19.5	11.0	8.0	9.5	11.5	10.5	11.0	3.5	.5	2.0
28	22.0	20.5	21.0	14.0	11.0	12.5	13.5	10.5	12.0	4.5	3.0	3.5
29	22.5	21.5	22.0	13.0	9.5	11.0	15.5	12.5	14.0	5.0	3.0	4.0
30	22.0	20.5	21.0	9.5	7.5	8.5	16.0	13.0	14.5	5.0	3.0	4.0
31	21.0	20.0	20.5	---	---	---	15.5	13.5	14.5	8.5	4.5	6.5
MONTH	22.5	14.0	19.0	20.0	6.0	11.0	16.0	3.0	11.0	16.5	.5	5.5

02107802005 MAXUNGA CREEK AT SECONDARY ROAD 1301 NEAR WARSAW, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	8.5	10.0	11.0	9.0	10.0	---	---	---	19.5	15.5	17.5
2	11.5	9.0	10.0	13.5	10.0	11.5	---	---	---	19.5	17.0	18.0
3	8.5	6.5	8.0	13.5	10.5	12.0	---	---	---	19.0	15.5	17.5
4	7.0	5.0	6.0	14.0	11.5	12.5	---	---	---	16.0	13.5	15.0
5	5.0	4.5	5.0	17.0	14.0	15.5	19.5	16.0	18.5	16.5	13.5	15.0
6	6.5	5.5	6.0	15.0	11.0	13.0	19.5	16.5	18.0	19.0	15.5	17.0
7	7.5	5.5	6.5	12.5	8.5	10.5	18.0	14.5	16.5	20.5	17.5	19.0
8	6.0	3.0	4.5	15.0	10.0	12.5	16.0	15.5	15.0	19.5	16.5	18.0
9	4.5	1.5	3.0	15.0	13.5	14.5	14.0	11.5	12.5	17.0	16.0	16.5
10	5.5	2.0	3.5	14.5	11.0	12.5	12.5	8.5	10.5	20.0	17.0	18.5
11	8.0	3.0	5.0	12.0	10.0	11.0	15.0	8.5	12.0	20.0	18.5	19.5
12	9.0	6.5	8.0	17.0	12.0	14.5	17.0	12.5	15.0	20.5	19.0	20.0
13	7.0	4.5	6.0	15.5	11.5	13.5	16.5	14.0	15.5	22.0	20.0	21.0
14	7.0	4.0	5.5	17.0	12.0	14.5	16.5	15.5	16.0	23.0	19.5	21.5
15	8.0	5.0	6.5	16.0	12.5	14.5	16.5	16.0	16.0	23.0	20.0	21.5
16	7.0	3.5	5.0	13.0	9.5	11.5	17.5	16.0	16.5	22.5	20.0	21.5
17	7.5	4.0	5.5	13.5	12.0	12.5	18.5	15.0	16.5	21.0	19.5	20.5
18	8.0	4.5	6.5	12.0	9.0	11.0	18.0	13.5	15.5	20.0	17.5	19.0
19	8.5	6.0	7.5	11.5	6.5	9.0	20.5	15.0	17.5	---	---	---
20	9.0	7.0	8.5	13.0	7.5	10.5	21.0	16.5	19.0	---	---	---
21	9.5	5.0	7.0	12.0	10.0	11.0	21.0	17.0	19.0	---	---	---
22	11.5	7.5	9.5	11.5	9.5	10.5	21.0	17.5	19.5	22.5	20.5	21.0
23	13.0	9.5	11.5	13.0	11.0	12.0	21.0	18.5	19.5	22.5	20.0	21.0
24	16.0	12.0	14.0	14.0	11.0	12.5	20.0	17.5	19.0	22.0	20.0	21.0
25	15.0	14.5	14.5	13.5	11.0	12.0	20.5	19.0	20.0	19.5	18.0	19.0
26	15.0	14.0	14.5	14.5	9.0	12.0	19.5	17.0	18.5	20.0	17.0	19.0
27	16.0	14.0	15.0	15.0	10.5	12.0	20.0	18.0	19.0	21.5	18.5	20.0
28	14.0	11.0	12.5	---	---	---	21.0	20.0	20.5	21.5	19.5	20.5
29	---	---	---	---	---	---	20.5	18.0	20.0	---	---	---
30	---	---	---	---	---	---	18.5	15.0	16.5	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	16.0	1.5	8.0	17.0	6.5	12.0	21.0	8.5	17.0	23.0	13.5	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	24.5	23.5	23.5	24.0	22.0	23.0
2	---	---	---	---	---	---	24.5	22.5	23.0	23.5	21.5	23.0
3	---	---	---	---	---	---	22.5	21.0	21.5	23.5	22.5	23.0
4	---	---	---	---	---	---	22.0	20.0	20.5	25.0	23.0	24.0
5	---	---	---	---	---	---	21.0	19.5	20.5	25.0	23.5	24.5
6	---	---	---	---	---	---	22.0	21.0	21.5	24.5	24.0	24.5
7	---	---	---	---	---	---	22.0	21.0	21.5	24.5	24.0	24.5
8	23.5	21.5	22.5	---	---	---	23.0	22.0	22.0	24.5	24.5	24.5
9	24.5	21.5	23.0	---	---	---	23.5	22.5	23.0	24.5	24.0	24.5
10	25.5	23.0	24.5	---	---	---	24.0	23.0	23.5	25.0	24.5	24.5
11	26.0	24.5	25.0	---	---	---	24.0	23.0	23.5	25.0	24.5	24.5
12	25.5	24.5	25.0	---	---	---	24.0	22.5	23.0	24.5	22.0	23.0
13	24.5	22.0	23.0	---	---	---	23.5	23.0	23.0	22.0	19.0	20.0
14	---	---	---	---	---	---	23.5	23.0	23.5	---	---	---
15	---	---	---	---	---	---	23.5	23.0	23.0	---	---	---
16	---	---	---	---	---	---	23.5	23.0	23.5	---	---	---
17	---	---	---	---	---	---	23.5	22.0	23.0	---	---	---
18	---	---	---	---	---	---	24.0	22.0	23.5	---	---	---
19	---	---	---	---	---	---	25.0	23.0	24.0	---	---	---
20	---	---	---	---	---	---	24.5	23.0	24.0	---	---	---
21	---	---	---	---	---	---	24.0	22.0	23.0	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	24.0	22.5	23.0	20.5	19.5	20.0
24	---	---	---	---	---	---	24.5	23.5	24.0	21.0	19.5	20.0
25	---	---	---	---	---	---	---	---	---	21.5	20.5	21.0
26	---	---	---	---	---	---	---	---	---	20.5	20.0	20.5
27	---	---	---	---	---	---	25.5	23.5	25.0	22.0	20.5	21.0
28	---	---	---	---	---	---	24.5	23.0	24.0	20.0	18.0	19.0
29	---	---	---	23.0	23.0	23.0	25.0	22.5	24.0	18.5	16.0	17.5
30	---	---	---	23.5	23.0	23.0	24.5	23.0	23.5	19.0	17.0	18.0
31	---	---	---	23.5	23.0	23.5	24.5	22.5	23.0	---	---	---
MONTH	26.0	21.5	24.0	23.5	23.0	23.0	25.5	19.5	23.0	25.0	16.0	22.0
YEAR	26.0	.5	14.5									

CAPE FEAR RIVER BASIN

0210787855 GROVE CREEK AT SECONDARY ROAD 1375 NEAR WARSAW, NC

LOCATION.--Lat 34°59'21", long 78°00'36", Duplin County, Hydrologic Unit 03030007, at bridge on Secondary Road 1375, and 4.0 miles east of Warsaw.

DRAINAGE AREA.--6.0 mi².

PERIOD OF RECORD.--September 1983 to current year.

REMARKS.--Station operated to define stream quantity and quality in the Grove Creek basin.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT											
24...	1200	2.3	85	5.8	19.5	769	5.0	5.2	1.5	K56	380
DEC											
18...	1100	2.5	84	5.8	12.0	766	6.8	7.6	1.1	K60	280
FEB											
01...	1000	11	74	5.7	8.0	755	8.2	9.0	1.3	220	6300
13...	0950	45	75	6.4	3.5	755	13	10.5	1.6	200	2800
21...	1240	9.5	78	6.5	6.0	775	6.6	11.2	1.2	250	3200
MAR											
11...	1020	2.6	82	6.3	9.5	765	5.8	10.0	1.2	K130	300
18...	1010	2.8	78	6.2	9.5	760	7.2	10.1	1.1	--	--
APR											
05...	1030	2.5	78	6.6	15.0	761	5.6	10.0	1.0	K180	330
24...	1115	1.1	85	5.7	18.0	760	6.0	7.8	1.2	260	270
MAY											
13...	1145	.90	79	6.1	19.5	761	6.5	6.7	1.5	K60	220
JUN											
10...	1045	.40	77	5.8	24.0	759	9.2	5.8	1.5	220	620
AUG											
02...	1050	23	94	5.2	22.5	760	14	6.3	1.6	--	--
05...	1140	1.0	120	5.6	20.0	765	8.4	7.4	1.5	280	1000
27...	1045	1.4	95	6.4	23.0	768	6.0	7.6	1.4	200	840
SEP											
04...	1010	.60	88	6.5	23.5	760	5.2	6.6	1.8	230	920
10...	1040	.30	82	6.4	24.0	760	4.9	6.2	1.8	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

02107878S5 GROVE CREEK AT SECONDARY ROAD 1375 NEAR WARSAW, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT											
24...	5.1	2.0	6.2	12	72	.10	.45	.39	.010	.40	<.010
DEC											
18...	6.2	1.7	7.2	12	64	.09	.43	—	<.010	.60	.050
FEB											
01...	5.3	2.0	8.2	11	79	.11	2.3	.98	.020	1.0	.090
13...	5.0	2.5	9.2	10	64	.09	7.8	—	<.010	1.8	.030
21...	5.6	1.7	8.9	10	63	.09	1.6	1.6	.010	1.6	<.010
MAR											
11...	—	—	—	—	—	—	—	1.4	.020	1.4	.070
18...	5.7	1.6	6.9	11	62	.08	.47	—	<.010	1.1	.100
APR											
05...	6.0	1.5	7.1	11	60	.08	.41	—	<.010	1.0	.050
24...	6.0	1.9	7.7	9.7	60	.08	.18	—	<.010	.90	.260
MAY											
13...	5.5	1.5	6.3	9.8	60	.08	.15	—	<.010	.80	.090
JUN											
10...	5.9	2.0	5.2	9.3	51	.07	.06	.58	.020	.60	.200
AUG											
02...	7.5	1.9	22	8.4	82	.11	5.1	—	<.010	.60	.020
05...	11	2.7	20	13	97	.13	.26	—	<.010	1.5	.070
27...	7.3	2.4	7.5	11	77	.10	.29	—	<.010	.70	.020
SEP											
04...	6.7	1.9	8.3	12	72	.10	.12	.30	.100	.40	.060
10...	6.3	2.5	6.9	12	71	.10	.06	—	<.010	.30	.070

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT											
24...	—	.60	1.0	4.4	.160	.49	.120	.100	9.7	4	.02
DEC											
18...	.65	.70	1.3	5.8	.110	.34	.100	.110	7.0	35	.34
FEB											
01...	.31	.40	1.4	6.2	.120	.37	.030	.040	9.6	5	.15
13...	.27	.30	2.1	9.3	.070	.22	.030	.040	8.5	6	.73
21...	—	.80	2.4	11	.050	.15	<.010	—	6.5	2	.05
MAR											
11...	.63	.70	2.1	9.3	.050	.15	.040	.040	6.3	2	.01
18...	.60	.70	1.8	8.0	.210	.65	.030	<.010	7.7	2	.02
APR											
05...	.35	.40	1.4	6.2	.090	.28	.030	.030	6.1	8	.05
24...	.14	.40	1.3	5.8	.110	.34	.120	.120	—	2	.00
MAY											
13...	.21	.30	1.1	4.9	.160	.49	.160	.140	6.0	4	.00
JUN											
10...	.30	.50	1.1	4.9	.200	.61	.170	.170	8.2	7	.00
AUG											
02...	.78	.80	1.4	6.2	.080	.25	.100	.050	13	13	.01
05...	.93	1.0	2.5	11	.030	.09	<.010	.020	6.2	1	.00
27...	.58	.60	1.3	5.8	.080	.25	.070	.030	9.1	2	.00
SEP											
04...	.54	.60	1.0	4.4	.110	.34	.090	.050	6.6	1	.00
10...	.33	.40	.70	3.1	.150	.46	.120	.090	6.8	1	.00

02107880875 GROVE CREEK AT SECONDARY ROAD 1301 NEAR KENANSVILLE, NC

LOCATION.--Lat 34°57'53", long 77°58'25", Duplin County, Hydrologic Unit 03030007, at bridge on Secondary Road 1301, and 1.0 mile west of Kenansville.

DRAINAGE AREA.--21.3 mi².

PERIOD OF RECORD.--September 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to current year.
WATER TEMPERATURE: October 1983 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1983.

REMARKS.--Station operated to define stream quantity and quality in the Grove Creek basin.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 174 microsiemens July 24; minimum, 63 microsiemens Feb. 12, Aug. 19.
WATER TEMPERATURE: Maximum, 27.0°C July 21; minimum, 0.5°C Jan. 21, 22, 23, 27.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT											
24...	1230	8.0	92	6.0	20.0	769	6.0	4.6	1.5	K64	520
DEC											
18...	1130	11	92	6.1	12.0	766	5.9	7.3	1.2	K48	290
FEB											
01...	1040	65	70	6.0	8.0	755	8.0	8.8	1.4	240	7700
13...	1040	175	65	6.5	4.0	755	14	10.5	1.5	520	2200
21...	1200	50	73	6.3	6.0	775	6.2	11.0	1.2	460	2800
MAR											
11...	1100	11	88	6.1	10.5	765	5.6	9.7	1.3	K100	270
18...	1040	21	78	6.0	9.5	760	7.2	9.5	1.2	--	--
APR											
05...	1120	13	82	6.6	16.0	761	5.8	9.0	1.1	K160	260
24...	1150	3.7	91	5.9	19.5	759	5.8	7.3	1.2	86	210
MAY											
13...	1220	5.5	87	6.4	19.5	761	6.2	6.9	1.7	220	280
JUN											
10...	1115	2.2	92	5.8	24.0	760	5.7	6.8	1.6	440	2000
AUG											
02...	1130	96	77	5.4	22.5	760	14	6.0	1.7	--	--
05...	1210	7.4	110	5.6	20.0	765	8.1	7.5	1.5	430	860
27...	1120	10	96	6.5	22.5	760	5.8	7.8	1.3	270	3000
SEP											
04...	1050	2.7	100	6.4	23.5	760	5.0	6.8	1.6	300	740
10...	1110	1.6	102	6.6	24.0	760	5.0	6.3	1.9	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

02107888875 GROVE CREEK AT SECONDARY ROAD 1301 NEAR KENANSVILLE, NC

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT											
24...	6.7	2.5	5.0	11	81	.11	1.7	1.1	.020	1.1	.020
DEC											
18...	7.6	2.0	5.9	11	69	.09	2.0	—	<.010	1.2	.070
FEB											
01...	5.2	1.9	7.1	9.3	74	.10	13	.88	.020	.90	.070
13...	4.7	2.2	8.2	8.1	65	.09	31	1.3	.010	1.3	.030
21...	5.6	1.7	8.1	9.5	59	.08	8.0	1.5	.020	1.5	.020
MAR											
11...	7.3	1.8	7.7	10	56	.08	1.7	1.5	.010	1.5	.060
18...	6.1	1.7	6.0	9.7	48	.07	2.7	1.7	.120	1.8	.400
APR											
05...	7.0	1.7	6.5	9.6	68	.09	2.4	—	<.010	1.4	.090
24...	7.6	2.1	7.0	6.7	70	.10	.70	1.7	.020	1.7	.180
MAY											
13...	8.0	1.8	4.6	7.8	64	.09	.95	1.4	.020	1.4	.090
JUN											
10...	7.7	2.2	9.6	8.7	66	.09	.39	1.8	.020	1.8	.140
AUG											
02...	6.8	2.3	16	7.3	80	.11	21	—	<.010	.50	.020
05...	10	2.6	16	12	93	.13	1.9	—	<.010	2.0	.050
27...	8.2	2.3	8.7	9.7	70	.10	1.9	—	<.010	1.4	.160
SEP											
04...	8.6	2.2	6.6	9.7	81	.11	.59	1.9	.020	1.9	.040
10...	8.6	3.1	5.8	11	95	.13	.41	—	<.010	2.8	.060

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT											
24...	.58	.60	1.7	7.5	.100	.31	.100	.070	10	5	.11
DEC											
18...	.33	.40	1.6	7.1	.070	.22	.060	.060	6.6	2	.06
FEB											
01...	.43	.50	1.4	6.2	.100	.31	.040	.020	11	7	1.2
13...	.47	.50	1.8	8.0	.100	.31	.040	.040	12	10	4.7
21...	.78	.80	2.3	10	.040	.12	.030	—	7.7	2	.27
MAR											
11...	.54	.60	2.1	9.3	.040	.12	<.010	.040	6.9	3	.09
18...	.90	1.3	3.1	14	—	—	—	—	6.5	5	.28
APR											
05...	.51	.60	2.0	8.9	.090	.28	.020	.030	6.6	6	.21
24...	.12	.30	2.0	8.9	.090	.28	.090	.100	—	34	.34
MAY											
13...	.31	.40	1.8	8.0	.120	.37	.120	.100	6.7	13	.19
JUN											
10...	.46	.60	2.4	11	.090	.28	.060	.060	7.5	6	.04
AUG											
02...	.78	.80	1.3	5.8	.150	.46	.070	.060	20	12	3.1
05...	1.6	1.6	3.6	16	.040	.12	.020	.020	9.8	3	.06
27...	.54	.70	2.1	9.3	.070	.21	.040	.030	14	17	.46
SEP											
04...	.46	.50	2.4	11	.080	.25	.080	.070	6.7	3	.02
10...	.34	.40	3.2	14	.070	.21	.050	.020	5.5	3	.01

CAPE FEAR RIVER BASIN

02107888875 GROVE CREEK AT SECONDARY ROAD 1301 NEAR KENANSVILLE, NC

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	84	80	81	107	96	100	92	90	91	95	93	94
2	83	78	80	107	99	101	92	90	91	97	90	93
3	90	83	87	101	99	100	94	90	93	93	82	89
4	100	89	93	100	98	99	90	85	86	80	73	77
5	94	92	93	98	94	96	87	83	86	79	75	77
6	94	92	93	96	94	94	85	79	82	86	80	83
7	94	92	93	96	94	95	85	80	83	89	86	88
8	93	91	92	97	95	96	91	86	88	90	89	89
9	94	91	93	98	96	97	92	90	91	90	89	9[illegible]
10	94	92	93	97	95	96	93	91	92	90	86	89
11	95	93	94	97	95	96	95	90	92	85	75	78
12	108	93	95	98	95	96	90	89	90	84	76	80
13	96	94	95	97	94	95	91	89	90	88	84	86
14	96	93	95	96	95	95	92	90	91	89	88	89
15	96	92	94	97	94	95	93	91	92	90	89	89
16	97	93	95	97	95	96	100	92	94	91	89	90
17	98	93	95	97	94	96	100	92	96	91	78	86
18	96	86	90	96	94	95	99	92	95	78	73	75
19	91	87	89	98	93	95	95	92	93	84	77	81
20	95	91	93	99	94	95	98	91	94	90	84	87
21	98	94	96	94	91	92	99	94	96	99	88	94
22	101	96	99	92	91	91	99	92	95	104	97	100
23	100	97	99	93	91	92	96	90	93	101	91	96
24	100	97	99	93	91	92	92	90	91	95	85	89
25	99	97	99	93	91	92	93	91	92	88	84	85
26	99	97	98	93	91	92	92	91	91	87	84	86
27	98	94	97	93	91	92	91	90	91	91	85	88
28	101	95	97	102	93	95	91	89	90	90	84	88
29	97	94	95	99	90	95	95	89	92	85	77	80
30	93	87	90	90	87	89	91	90	90	83	78	80
31	98	93	96	---	---	---	95	89	91	85	74	78
MONTH	108	78	93	107	87	95	100	79	91	104	73	86

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	83	70	76	86	83	84	89	82	86	96	93	94
2	85	76	80	84	79	80	85	82	84	96	93	94
3	82	76	79	84	81	82	86	83	85	98	91	95
4	89	82	85	86	83	84	86	84	84	91	83	86
5	91	80	87	92	84	87	83	81	82	92	87	89
6	80	73	75	89	87	88	88	81	83	96	91	93
7	85	75	80	92	87	89	82	81	82	97	96	96
8	89	84	87	92	88	90	83	82	83	96	95	96
9	93	88	91	91	88	89	84	83	83	96	91	94
10	94	91	92	91	86	88	84	83	83	94	91	92
11	95	91	92	90	88	89	85	83	84	92	90	91
12	90	63	69	90	88	90	84	83	83	92	87	90
13	78	64	71	90	87	88	85	83	84	89	84	87
14	88	78	82	93	88	90	86	83	84	93	89	91
15	89	85	87	91	89	90	83	82	83	94	92	93
16	91	87	89	91	88	89	86	79	83	95	94	94
17	91	87	90	92	79	85	79	74	76	95	94	95
18	91	87	89	81	78	79	80	76	78	97	95	96
19	90	86	88	87	81	82	85	81	83	99	96	97
20	89	77	83	90	83	85	88	85	86	99	98	99
21	79	73	76	87	85	86	90	86	88	100	98	99
22	95	77	85	87	64	74	92	89	90	99	89	95
23	95	81	85	71	64	67	92	90	91	110	84	101
24	87	84	85	78	71	75	95	91	92	111	99	105
25	90	85	86	78	71	75	97	93	95	99	98	98
26	89	84	85	78	70	73	96	94	95	98	96	97
27	87	82	84	80	76	78	96	94	95	99	97	97
28	86	81	83	82	80	81	98	94	95	100	98	99
29	---	---	---	84	81	83	95	94	95	101	99	100
30	---	---	---	88	84	85	95	93	94	101	100	101
31	---	---	---	88	83	85	---	---	---	101	99	100
MONTH	95	63	84	93	64	84	98	74	86	111	83	95

CAPE FEAR RIVER BASIN

02107888075 GROVE CREEK AT SECONDARY ROAD 1301 NEAR KENANSVILLE, NC

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	101	99	100	114	110	112	119	94	109	103	100	101
2	102	101	102	114	108	110	93	77	84	103	99	101
3	104	103	103	110	106	107	106	93	99	102	101	101
4	107	102	104	113	107	110	111	105	109	102	100	101
5	106	102	104	116	109	114	111	110	110	102	101	101
6	101	87	92	122	115	119	110	109	109	105	101	102
7	94	90	92	118	114	116	109	107	108	104	101	102
8	91	76	81	118	115	117	108	78	96	104	102	103
9	92	86	91	120	114	118	90	78	82	105	102	103
10	97	91	94	120	117	119	99	90	95	104	102	103
11	100	96	98	119	103	111	102	97	100	105	103	103
12	102	98	100	116	110	113	106	102	104	103	102	102
13	102	99	100	115	110	114	105	104	104	103	102	103
14	105	101	102	118	73	111	105	102	104	104	102	103
15	106	104	104	120	113	117	105	102	103	104	103	103
16	105	89	97	117	109	112	105	103	104	104	103	103
17	93	88	90	112	99	108	104	96	102	104	103	103
18	95	91	93	122	112	117	97	78	90	104	103	103
19	101	95	98	113	110	112	78	63	68	104	103	103
20	101	99	100	113	110	112	83	71	78	105	103	104
21	102	100	101	117	113	116	92	83	87	104	102	103
22	105	102	103	119	114	117	90	83	86	103	97	101
23	106	103	104	116	83	109	94	84	89	98	89	93
24	107	105	106	174	102	152	100	94	97	99	93	96
25	109	107	108	152	137	144	101	95	99	101	98	99
26	109	105	107	143	128	138	99	89	93	99	88	97
27	109	106	108	131	120	125	100	94	97	119	100	112
28	111	107	109	127	123	125	101	100	100	126	120	124
29	112	109	110	123	108	115	102	100	101	122	114	118
30	116	110	113	117	107	111	103	101	102	114	109	111
31	---	---	---	121	117	119	102	100	101	---	---	---
MONTH	116	76	100	174	73	117	119	63	97	126	88	103
YEAR	174	63	94									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.0	17.0	17.5	21.5	19.5	20.5	11.0	8.0	9.5	17.0	14.0	15.5
2	16.5	15.0	15.5	21.5	19.0	20.0	10.5	7.5	9.0	17.5	15.0	16.5
3	16.0	12.5	14.5	20.0	16.0	17.0	12.5	10.5	11.5	16.5	11.0	13.5
4	16.0	14.5	11.0	17.5	15.0	16.0	11.5	9.5	10.0	11.0	9.0	10.0
5	17.0	14.5	16.0	17.5	16.0	17.0	9.5	9.0	9.0	9.0	7.0	8.5
6	17.5	12.0	16.0	16.0	14.0	15.0	9.5	8.0	9.0	8.0	5.0	6.5
7	18.5	16.0	17.0	13.5	11.0	12.0	7.5	4.0	5.0	8.5	5.0	6.5
8	18.5	16.0	17.0	11.5	8.5	10.0	6.5	3.0	4.5	8.0	5.5	6.5
9	19.0	16.0	17.0	11.5	8.0	9.5	7.0	3.5	5.0	6.5	4.5	5.5
10	19.0	16.5	17.5	13.0	9.5	11.0	9.0	5.0	7.0	5.0	4.0	4.5
11	19.5	17.5	18.0	15.5	13.0	14.0	11.5	9.0	10.0	6.0	4.5	5.0
12	19.5	16.5	18.0	14.0	11.5	12.5	10.5	8.0	9.0	5.0	3.5	4.5
13	19.0	16.0	17.5	11.0	8.5	10.0	12.0	8.5	10.0	5.0	2.5	3.5
14	18.5	15.0	16.5	10.5	7.5	9.0	13.0	9.5	11.5	5.0	3.0	4.0
15	18.0	14.5	16.0	10.5	7.0	9.0	13.5	11.0	12.0	5.0	3.0	4.0
16	19.0	15.5	17.5	13.5	10.0	12.0	13.0	11.5	12.0	4.5	1.5	3.0
17	20.0	17.0	19.0	12.5	9.0	10.5	14.5	12.0	13.0	5.5	3.5	4.5
18	21.0	19.5	20.0	11.0	7.0	9.0	15.0	12.0	13.5	7.0	5.5	6.0
19	22.0	19.5	20.5	15.0	10.5	13.0	15.5	12.5	14.0	8.5	5.5	6.5
20	23.0	20.0	21.0	12.5	8.5	10.5	15.5	14.0	15.0	6.5	1.0	5.0
21	23.0	20.5	21.5	8.0	6.0	7.0	16.5	14.5	15.5	1.0	.5	1.0
22	23.0	20.5	22.0	8.0	6.0	7.0	16.0	14.5	15.5	1.5	.5	1.0
23	23.0	20.5	21.5	9.5	6.5	8.0	14.0	11.0	12.5	1.5	.5	1.0
24	22.5	20.0	21.0	9.5	6.5	8.0	12.0	8.5	10.5	2.0	1.0	1.5
25	21.5	19.0	20.0	9.5	6.0	8.0	14.5	11.0	13.0	4.5	1.5	3.0
26	21.5	19.0	20.0	10.0	6.0	8.0	12.0	10.0	11.0	4.0	1.5	3.0
27	21.5	18.0	20.0	12.5	8.0	10.0	12.5	11.0	11.5	4.0	.5	2.5
28	23.0	20.5	21.5	15.0	12.0	13.0	14.5	11.5	13.0	5.0	3.5	4.0
29	24.0	21.5	22.5	13.0	9.0	11.0	16.5	13.0	14.5	5.0	3.0	4.0
30	22.5	21.0	21.5	10.0	6.5	8.5	17.0	14.0	15.5	5.5	3.0	4.0
31	22.0	20.5	21.0	---	---	---	16.5	14.5	15.0	8.5	5.0	7.0
MONTH	24.0	12.0	18.5	21.5	6.0	11.5	17.0	3.0	11.0	17.5	.5	5.5

CAPE FEAR RIVER BASIN

0210788875 GROVE CREEK AT SECONDARY ROAD 1301 NEAR KENANSVILLE, NC

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.5	8.5	11.0	11.0	9.0	10.0	22.0	17.0	19.5	22.0	16.0	18.5
2	12.0	9.5	10.5	15.0	10.0	12.5	18.5	14.0	16.0	20.5	17.0	19.0
3	9.5	7.0	8.5	15.0	10.5	12.5	17.0	11.0	14.0	19.5	16.0	18.0
4	7.0	5.0	6.0	15.0	11.5	13.5	20.0	13.0	16.5	18.5	13.5	16.0
5	5.5	4.5	5.0	19.5	14.5	16.5	21.5	16.0	18.0	19.0	13.0	16.0
6	6.5	5.5	6.0	16.0	11.0	13.5	20.0	17.5	19.0	21.0	16.0	18.0
7	7.5	5.5	6.5	14.0	8.5	11.0	19.5	14.5	16.5	22.5	18.0	20.0
8	6.5	3.0	4.5	16.5	10.5	13.5	17.0	13.5	15.0	20.5	17.0	18.5
9	4.5	1.5	3.0	15.5	14.0	15.0	15.0	11.5	13.0	18.0	16.0	17.0
10	6.0	1.5	3.5	16.0	11.0	13.5	13.5	8.0	11.0	20.5	17.5	19.0
11	8.5	3.0	5.5	13.0	9.5	11.5	16.0	8.5	12.0	20.5	18.5	19.5
12	10.5	6.5	8.5	19.0	12.5	15.5	19.0	12.5	15.5	21.5	19.0	20.0
13	7.0	5.0	6.0	17.0	12.0	14.5	17.5	14.5	16.0	22.5	20.0	21.0
14	7.5	4.0	6.0	19.0	13.0	15.5	17.5	16.0	16.5	23.5	19.5	21.5
15	8.5	5.5	7.0	17.5	12.5	15.0	18.0	16.5	17.0	22.5	20.0	21.5
16	7.5	3.0	5.0	14.5	9.5	12.0	19.0	16.5	17.5	22.5	20.0	21.0
17	8.0	3.5	5.5	14.5	12.5	13.0	20.0	15.0	17.0	21.0	19.0	20.0
18	9.5	4.5	6.5	13.0	9.0	11.0	19.5	13.5	16.5	20.0	17.0	18.5
19	10.0	5.5	8.0	12.5	6.5	9.0	22.0	15.5	18.5	20.0	15.5	18.0
20	9.5	7.5	9.0	15.0	7.5	11.0	23.5	17.0	20.0	19.5	16.5	18.5
21	10.0	5.0	7.5	12.5	10.5	11.5	24.0	17.0	20.5	21.0	18.5	20.0
22	12.5	8.0	10.0	12.5	10.0	11.0	24.0	17.0	20.5	22.0	19.5	20.5
23	14.5	10.0	12.5	14.0	11.5	12.5	24.0	18.5	21.0	22.5	20.5	21.5
24	18.0	13.0	15.0	15.5	11.5	13.0	22.5	17.0	20.0	22.5	20.0	21.0
25	16.0	15.0	15.5	14.5	12.0	13.0	23.5	19.5	21.0	20.0	18.0	19.0
26	16.0	14.5	15.0	16.0	9.0	12.0	22.5	16.5	20.0	21.0	16.5	18.5
27	17.5	14.5	15.5	18.0	11.0	14.0	23.5	18.5	20.5	22.0	17.5	19.5
28	14.5	11.0	13.0	21.0	14.0	17.5	23.5	20.0	21.5	22.5	19.5	21.0
29	---	---	---	23.0	16.5	19.5	22.5	19.0	20.5	23.0	20.5	21.5
30	---	---	---	24.0	18.5	21.0	21.0	15.0	18.0	21.5	19.5	20.0
31	---	---	---	23.5	18.0	20.5	---	---	---	22.5	18.5	20.5
MONTH	18.0	1.5	8.5	24.0	6.5	13.5	24.0	8.0	17.5	23.5	13.0	19.5

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.0	21.5	23.0	22.5	20.5	21.0	26.0	24.5	25.0	24.5	22.0	23.0
2	24.5	20.5	23.0	24.5	21.0	22.5	25.0	22.5	23.5	24.5	21.5	23.0
3	24.5	21.0	23.0	24.5	21.5	23.0	22.5	21.0	22.0	25.0	22.5	24.0
4	24.5	21.5	23.0	25.0	22.0	23.5	22.0	19.5	21.0	26.0	23.5	24.5
5	25.0	22.0	23.5	25.0	22.5	23.5	22.5	19.5	21.0	26.0	23.5	25.0
6	24.5	22.0	23.5	25.0	22.5	23.5	23.0	21.0	22.0	26.5	24.0	25.0
7	23.5	22.0	22.5	25.0	23.5	24.0	24.5	21.5	23.0	26.5	24.0	25.5
8	23.5	21.5	22.5	25.5	22.0	24.0	23.0	22.5	23.0	26.5	24.0	25.5
9	25.0	21.5	23.5	26.0	23.0	24.5	23.5	22.5	23.0	26.5	24.0	25.0
10	26.5	22.5	24.5	26.5	23.5	25.0	24.0	22.5	23.0	26.0	24.0	25.0
11	26.5	24.0	25.5	26.0	23.0	24.5	24.5	22.5	23.5	26.0	24.5	25.0
12	25.5	23.5	24.5	24.5	22.5	23.5	24.5	22.5	23.5	24.5	22.0	23.0
13	24.5	20.5	21.5	26.0	22.5	24.0	25.0	22.5	24.0	22.0	19.0	20.0
14	20.5	16.5	19.0	26.0	23.0	24.0	25.5	23.0	24.0	18.5	15.0	17.0
15	22.0	18.0	20.0	26.0	23.0	24.0	25.0	23.0	24.0	18.5	15.0	17.0
16	22.0	20.5	21.5	25.0	24.0	24.5	25.5	23.0	24.5	19.0	15.5	17.0
17	24.5	20.5	22.5	25.0	23.0	24.0	25.0	23.5	24.0	19.5	15.5	17.5
18	25.0	22.5	24.0	25.0	22.5	23.5	25.0	24.0	24.5	20.0	16.5	18.5
19	25.0	23.0	24.0	24.5	20.5	22.5	24.5	24.0	24.0	21.0	17.5	19.0
20	24.0	21.0	22.5	25.0	21.5	23.5	25.0	23.5	24.0	21.5	19.5	20.5
21	22.5	19.0	21.0	27.0	23.5	25.0	24.5	24.0	24.5	21.5	19.0	20.0
22	22.5	19.0	21.0	25.5	23.5	25.0	24.0	23.0	23.5	21.0	20.0	20.5
23	23.0	19.5	21.5	24.0	22.5	23.0	23.0	22.0	22.5	21.5	19.5	20.5
24	25.0	20.5	22.5	23.5	23.0	23.0	22.5	20.0	21.5	22.0	19.0	20.5
25	25.0	22.5	23.5	23.0	22.5	23.0	23.5	21.5	22.5	22.5	21.0	21.5
26	25.0	22.5	23.5	24.0	23.0	23.5	25.0	23.0	23.5	21.0	20.0	20.5
27	23.0	20.0	21.5	25.0	23.5	24.0	25.0	23.0	24.0	22.5	20.5	21.5
28	22.0	19.0	20.5	24.0	23.5	24.0	24.5	22.5	23.5	20.5	18.5	19.5
29	23.0	19.0	21.0	23.5	23.0	23.5	24.5	22.5	23.5	19.5	16.0	17.5
30	22.0	21.0	21.5	24.5	23.0	24.0	24.0	22.5	23.5	20.0	16.5	18.0
31	---	---	---	25.0	24.0	24.5	24.0	22.0	23.0	---	---	---
MONTH	26.5	16.5	22.5	27.0	20.5	23.5	26.0	19.5	23.5	26.5	15.0	21.5
YEAR	27.0	.5	16.5									

0210789100 GROVE CREEK AT KENANSVILLE, NC

LOCATION.--Lat 34°58'13", long 77°57'32", Duplin County, Hydrologic Unit 03030007, in right channel on downstream side of bridge on State Highway 11, 0.3 mi upstream from Buckskin Swamp, and 1 mi northeast of Kenansville.

DRAINAGE AREA.--22.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s June 8, 1983, gage height, 69.25 ft; minimum, 0.78 ft³/s July 10, 11, 1985, gage height, 65.58 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 275 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gageheight (ft)
Aug. 19	1700	*207	*67.53				

Maximum recorded, 207 ft³/s, Aug. 19, but may have been higher during period of no gage-height record Feb. 8-13; minimum discharge, 0.78 ft³/s July 10, 11, gage height 65.58 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	12	13	7.6	59	23	17	4.2	1.8	1.1	18	5.1
2	30	11	11	7.9	62	28	15	4.1	1.5	1.1	84	4.0
3	20	9.5	14	13	89	25	15	5.1	1.4	1.0	51	3.5
4	15	9.4	16	39	58	20	14	7.3	1.3	.91	15	2.9
5	12	13	17	35	44	20	13	5.3	1.4	.97	8.3	2.6
6	11	11	40	19	130	19	14	4.5	2.4	1.2	6.2	2.2
7	9.9	9.2	30	14	129	17	13	3.9	2.2	1.0	4.8	2.0
8	9.6	7.9	17	12	e75	17	11	3.4	6.0	.98	6.8	1.9
9	9.0	7.6	15	11	e45	17	11	3.9	4.8	.90	25	1.8
10	8.3	7.7	14	12	e32	17	11	4.5	2.2	.85	15	1.7
11	7.7	7.7	e14	25	e30	16	11	4.3	1.7	1.2	10	1.7
12	7.1	7.8	13	20	e230	17	11	6.1	1.5	1.0	7.6	1.6
13	6.7	7.0	13	14	e180	15	11	6.3	1.4	.98	5.1	1.5
14	6.5	6.5	12	12	86	15	13	4.4	1.3	2.4	3.6	1.4
15	6.2	6.4	11	11	52	15	14	3.3	1.2	2.7	2.8	1.3
16	6.3	6.6	11	9.9	40	14	14	3.2	1.6	1.4	2.3	1.4
17	6.6	6.6	11	15	33	25	28	3.2	2.2	2.2	2.6	1.4
18	12	6.5	11	35	29	28	17	2.9	1.8	1.8	11	1.3
19	14	7.4	10	23	26	18	12	2.4	1.5	1.3	135	1.3
20	10	9.8	10	16	34	16	10	2.2	1.4	1.2	98	1.3
21	9.1	9.2	10	15	49	15	9.0	2.3	1.3	1.1	35	1.3
22	8.5	8.2	10	14	38	40	8.0	3.4	1.2	1.1	28	1.6
23	8.5	8.1	9.7	12	31	75	7.1	15	1.1	1.6	23	2.7
24	8.5	8.2	8.9	12	28	44	6.5	11	1.1	8.8	13	2.4
25	7.9	7.9	8.8	13	26	38	6.4	5.1	1.0	21	9.8	2.1
26	7.6	7.7	8.4	12	26	39	5.8	3.7	1.0	29	14	3.2
27	7.3	7.6	8.1	9.8	27	30	5.4	2.8	.97	32	11	18
28	7.4	9.1	8.7	11	26	25	5.3	2.2	.94	22	7.7	22
29	14	22	8.5	16	---	23	4.9	2.0	.93	31	6.9	7.5
30	28	22	8.2	14	---	20	4.4	1.8	.98	48	6.0	4.5
31	17	---	7.9	26	---	18	---	1.9	---	21	6.0	---
TOTAL	358.7	280.6	400.2	506.2	1714	749	337.8	135.7	51.12	242.79	672.5	107.2
MEAN	11.6	9.35	12.9	16.3	61.2	24.2	11.3	4.38	1.70	7.83	21.7	3.57
MAX	30	22	40	39	230	75	28	15	6.0	48	135	22
MIN	6.2	6.4	7.9	7.6	26	14	4.4	1.8	.93	.85	2.3	1.3
CFSM	.51	.41	.57	.72	2.71	1.07	.50	.19	.08	.35	.96	.16
IN.	.59	.46	.66	.83	2.82	1.23	.56	.22	.08	.40	1.11	.18

CAL YR 1984	TOTAL	10127.1	MEAN	27.7	MAX	977	MIN	1.2	CFSM	1.23	IN. 16.67
WTR YR 1985	TOTAL	5555.81	MEAN	15.2	MAX	230	MIN	.85	CFSM	.67	IN. 9.14

e Estimated

CAPE FEAR RIVER BASIN

0210789100 GROVE CREEK AT KENANSVILLE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to current year.
WATER TEMPERATURE: October 1983 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1983.

REMARKS.--Station operated to define stream quantity and quality in the Grove Creek basin.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 277 microsiemens July 11; minimum, 28 microsiemens Aug. 19, 20.
WATER TEMPERATURE: Maximum, 27.5°C July 10, 21; minimum, 0.5°C Jan. 21, 22, 23, 24, 27.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	BAROMETRIC PRESSURE (MM OF HG)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT											
24...	1305	8.5	109	6.2	20.0	769	5.8	5.9	1.4	110	560
DEC											
18...	1210	11	100	6.2	12.0	766	7.6	7.2	1.2	K76	230
FEB											
01...	1130	65	77	6.0	8.5	755	8.3	9.2	1.2	200	K8300
13...	1120	180	65	6.4	4.5	755	13	10.6	1.4	920	3000
21...	1130	52	72	6.5	6.0	775	6.0	11.5	1.1	500	4900
MAR											
11...	1140	12	90	6.2	10.5	765	5.6	10.2	1.0	K100	330
18...	1110	22	80	6.0	9.5	760	7.5	9.8	1.1	--	--
APR											
05...	1225	14	92	6.6	18.0	761	5.5	9.3	1.0	K100	1100
24...	1245	4.1	114	5.9	19.0	760	5.5	5.5	1.3	130	920
MAY											
13...	1315	5.8	108	6.4	20.0	761	6.0	6.3	1.3	360	660
JUN											
10...	1145	2.4	112	5.9	25.0	760	9.0	6.4	1.5	220	980
AUG											
02...	1220	108	80	5.4	22.5	760	14	6.3	1.6	--	--
05...	1240	8.2	120	5.7	20.0	765	8.0	7.8	1.4	300	1000
27...	1200	11	102	6.5	23.0	768	5.8	7.8	1.3	290	730
SEP											
04...	1130	3.0	120	6.5	23.5	760	5.1	6.3	1.5	250	900
10...	1200	1.8	142	6.5	24.0	760	5.0	6.0	1.8	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

02107891OO GROVE CREEK AT KENANSVILLE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT											
24...	8.5	2.7	4.1	12	87	.12	2.0	.79	.010	.80	.020
DEC											
18...	8.6	2.0	6.7	16	74	.10	2.2	--	<.010	1.2	.050
FEB											
01...	5.5	2.1	6.6	8.9	64	.09	11	--	<.010	.80	.050
13...	4.4	2.2	6.3	7.3	66	.09	32	1.1	.030	1.1	.030
21...	6.0	1.7	8.1	9.5	60	.08	8.4	--	<.010	1.3	<.010
MAR											
11...	7.4	1.8	6.2	11	56	.08	1.8	1.5	.020	1.5	.070
18...	6.6	1.7	5.9	9.6	66	.09	3.9	.80	.030	.83	.050
APR											
05...	8.1	1.8	6.1	10	68	.09	2.5	--	<.010	1.5	.080
24...	9.7	2.0	6.7	9.7	75	.10	.83	.49	.010	.50	.160
MAY											
13...	9.5	2.1	6.8	8.7	71	.10	1.1	1.7	.020	1.7	.140
JUN											
10...	11	2.4	6.9	9.8	88	.12	.57	1.3	.020	1.3	.170
AUG											
02...	7.3	2.2	18	7.6	80	.11	23	--	<.010	.80	<.010
05...	12	2.7	16	11	93	.13	2.1	--	<.010	1.9	.070
27...	9.0	2.4	8.7	10	82	.11	2.4	--	<.010	1.0	.070
SEP											
04...	11	2.4	7.6	12	93	.13	.75	1.7	.050	1.7	.100
10...	13	3.9	8.7	12	111	.15	.54	2.4	.010	2.4	.140

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT											
24...	.78	.80	1.6	7.1	.190	.59	.150	.150	9.8	4	.09
DEC											
18...	.35	.40	1.6	7.1	.170	.52	.150	.150	7.3	3	.09
FEB											
01...	.55	.60	1.4	6.2	.140	.43	.040	.040	11	5	.88
13...	1.1	1.1	2.2	9.7	.100	.31	.040	.050	12	13	6.3
21...	--	.70	2.0	8.9	.060	.18	<.010	--	8.1	3	.42
MAR											
11...	.93	1.0	2.5	11	.110	.34	.050	.070	7.0	3	.10
18...	.75	.80	1.6	7.2	--	--	--	--	7.1	4	.24
APR											
05...	.32	.40	1.9	8.4	.230	.71	.160	.120	6.7	4	.15
24...	.44	.60	1.1	4.9	.120	.37	.140	.130	6.4	8	.09
MAY											
13...	.56	.70	2.4	11	.360	1.1	.340	.330	6.7	6	.09
JUN											
10...	.43	.60	1.9	8.4	.320	.98	.310	.290	9.9	8	.05
AUG											
02...	--	.70	1.5	6.6	.060	.18	<.010	.020	22	11	3.2
05...	1.0	1.1	3.0	13	.190	.58	.140	.140	10	3	.07
27...	.73	.80	1.8	8.0	.180	.55	.130	.110	15	18	.53
SEP											
04...	.90	1.0	2.7	12	.250	.77	.220	.200	6.7	1	.00
10...	.36	.50	2.9	13	.360	1.7	.480	.480	5.5	1	.00

CAPE FEAR RIVER BASIN

0210789100 GROVE CREEK AT KENANSVILLE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	93	88	91	107	101	104	100	95	98	101	97	99
2	91	89	90	108	103	105	102	98	101	101	97	99
3	100	91	96	109	104	106	101	98	100	101	89	96
4	106	99	101	111	106	108	97	93	95	88	79	83
5	106	102	103	106	101	102	97	93	95	84	79	81
6	106	103	105	106	100	103	92	85	87	95	84	88
7	106	104	105	111	103	107	94	86	89	97	93	95
8	107	101	104	112	105	108	99	94	96	101	96	98
9	108	101	103	114	107	111	101	99	99	102	97	100
10	107	102	105	112	107	109	102	99	100	106	97	101
11	107	101	105	110	106	108	100	97	98	95	83	87
12	110	103	106	111	108	109	99	96	98	95	84	88
13	110	105	108	114	111	112	100	96	98	97	91	94
14	111	106	109	115	109	113	101	97	99	100	97	98
15	114	107	111	117	109	113	100	97	99	102	98	100
16	113	107	111	115	108	112	102	98	100	103	101	102
17	114	105	110	114	108	111	101	98	99	103	87	96
18	111	96	102	113	108	111	101	98	100	86	80	81
19	99	95	97	112	106	109	101	98	100	91	81	86
20	104	99	101	110	106	108	101	97	99	97	91	93
21	106	102	104	110	103	107	101	97	100	108	98	105
22	111	104	107	109	106	108	100	97	99	114	108	111
23	111	106	109	108	106	107	101	97	99	110	104	109
24	111	106	108	108	104	107	102	99	101	105	99	102
25	111	106	109	108	104	106	103	99	100	99	95	97
26	110	105	108	110	104	107	100	97	99	99	95	96
27	110	106	108	109	103	106	103	98	100	102	98	99
28	110	105	107	107	103	105	101	96	99	100	96	98
29	106	97	102	108	96	102	99	95	98	96	86	89
30	98	93	95	98	94	96	99	95	98	90	86	88
31	103	96	99	---	---	---	100	95	98	90	78	84
MONTH	114	88	104	117	94	107	103	85	98	114	78	95

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	79	75	77	86	84	85	---	---	---	127	113	120
2	80	75	77	85	80	82	---	---	---	126	114	120
3	81	77	78	85	81	83	---	---	---	125	113	119
4	88	79	84	87	83	85	---	---	---	112	104	109
5	89	80	86	87	84	86	---	---	---	118	107	113
6	79	73	75	91	85	87	97	93	95	130	110	119
7	81	74	77	93	89	90	98	94	96	130	113	122
8	88	82	85	93	89	91	102	96	99	138	116	127
9	92	81	90	92	90	91	106	98	102	130	114	124
10	93	91	92	97	90	93	108	99	103	125	111	119
11	93	92	93	96	90	93	104	100	102	122	109	116
12	92	65	70	93	90	91	103	98	101	117	104	109
13	77	65	69	93	89	91	103	98	101	119	102	109
14	82	77	80	96	89	92	102	98	100	129	108	118
15	85	81	83	93	80	91	101	97	99	136	113	124
16	87	84	85	94	90	93	102	95	98	137	117	129
17	87	85	86	95	81	87	95	82	87	136	114	126
18	87	85	86	83	79	81	96	88	91	134	116	125
19	86	84	86	90	84	87	102	94	98	139	119	130
20	85	76	80	95	86	90	105	99	101	152	123	138
21	75	71	73	97	94	95	108	102	105	151	122	139
22	79	74	76	96	70	82	113	105	109	143	111	127
23	81	78	80	74	70	71	116	106	111	114	90	105
24	82	79	81	84	75	80	122	106	113	131	113	120
25	83	81	82	86	81	83	120	109	114	123	117	120
26	85	81	83	84	79	81	120	111	116	129	118	123
27	84	80	82	87	85	86	120	113	117	128	122	126
28	85	80	82	---	---	---	119	112	116	---	---	---
29	---	---	---	---	---	---	129	113	120	---	---	---
30	---	---	---	---	---	---	130	115	123	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	93	65	81	97	70	87	130	82	105	152	90	121

0210789100 GROVE CREEK AT KENANSVILLE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	232	207	222	100	80	90	136	114	124
2	---	---	---	219	196	211	105	79	90	147	127	137
3	---	---	---	227	207	218	130	86	109	151	121	140
4	171	152	161	234	219	228	135	110	124	156	120	142
5	166	144	158	241	222	232	128	116	123	155	110	137
6	165	123	142	235	185	206	128	118	123	160	109	140
7	140	109	121	221	199	214	129	118	124	152	103	134
8	135	85	102	225	217	222	129	72	111	153	96	130
9	112	87	101	248	228	237	69	61	63	162	100	138
10	124	111	115	273	235	254	89	69	80	171	128	149
11	138	117	125	277	197	237	95	88	91	169	113	147
12	146	120	135	225	208	218	112	94	104	175	115	151
13	160	131	149	235	212	228	120	105	112	190	126	162
14	169	147	159	243	134	216	131	109	120	186	135	167
15	174	146	163	192	130	162	138	116	129	188	140	170
16	173	147	163	208	181	192	148	117	136	192	134	166
17	143	123	130	209	150	175	140	119	136	197	156	182
18	151	128	137	193	158	171	121	48	85	197	153	177
19	161	135	148	208	173	193	56	28	37	193	154	179
20	174	144	159	218	189	208	49	28	41	193	154	179
21	197	155	171	230	201	219	67	48	57	188	156	177
22	201	163	187	243	213	227	67	52	63	187	146	171
23	192	173	185	247	151	221	90	62	76	144	117	128
24	197	179	190	211	115	171	117	92	108	142	111	127
25	207	192	202	206	183	194	125	110	118	150	125	138
26	212	201	207	195	166	177	107	90	99	148	114	136
27	222	205	216	168	151	157	115	95	104	140	101	128
28	243	220	233	159	129	154	125	109	117	142	133	136
29	247	227	239	144	85	118	130	115	122	144	132	139
30	244	228	239	95	79	84	135	114	124	140	127	136
31	---	---	---	116	99	108	132	119	127	---	---	---
MONTH	247	85	164	277	79	196	148	28	101	197	96	149
YEAR	277	28	118									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.5	17.0	17.5	20.5	19.0	19.5	10.5	7.5	9.0	16.0	13.5	14.5
2	16.5	15.0	15.5	20.5	19.0	19.5	10.0	7.0	9.0	16.5	14.5	15.5
3	15.5	12.5	14.5	19.0	15.5	16.5	12.5	10.5	11.0	16.0	10.5	13.5
4	16.0	14.0	15.0	17.0	15.5	16.0	11.0	9.0	10.0	10.5	8.5	9.5
5	17.0	15.0	16.0	17.5	15.0	17.0	9.5	8.5	9.0	9.0	6.5	8.0
6	18.0	15.5	16.5	16.0	14.0	15.0	9.5	7.5	9.0	7.5	4.5	6.0
7	18.0	16.5	17.0	14.0	11.0	12.0	7.5	3.5	5.0	8.0	4.5	6.0
8	18.5	16.5	17.0	11.0	8.5	10.0	6.0	2.5	4.0	7.5	5.0	6.0
9	18.0	16.5	17.0	11.0	8.0	9.5	6.5	3.0	5.0	6.0	4.5	5.5
10	18.5	16.5	17.5	13.0	9.5	11.0	9.0	4.5	6.5	4.5	4.0	4.0
11	19.0	18.0	18.5	15.0	13.0	14.0	10.5	8.5	9.5	6.0	4.0	5.0
12	19.0	17.5	18.0	14.5	11.5	12.5	10.0	7.5	9.0	4.5	3.0	4.0
13	18.5	15.0	17.0	11.5	9.0	9.5	10.5	8.0	9.5	4.5	2.0	3.5
14	17.0	16.0	16.5	9.5	8.0	9.0	12.0	9.0	10.5	4.5	2.5	3.5
15	17.0	15.0	16.0	10.0	7.5	8.5	12.5	10.0	11.0	4.5	3.0	3.5
16	18.0	16.5	17.0	13.0	10.5	11.5	12.5	10.0	11.5	3.5	1.5	2.5
17	20.0	17.5	18.5	12.5	9.5	10.5	13.5	11.5	12.5	5.5	3.0	4.0
18	21.0	19.0	20.0	10.5	7.5	9.0	14.0	11.0	12.5	7.0	5.0	6.0
19	21.5	19.0	20.0	14.0	10.5	12.5	14.0	11.5	13.0	8.0	5.0	6.5
20	21.5	20.0	20.5	13.0	8.0	10.5	14.5	13.0	14.0	6.0	1.0	4.5
21	21.0	20.0	20.5	8.0	6.0	7.0	16.0	14.0	14.5	1.0	.5	.5
22	21.5	20.0	21.0	7.5	6.0	7.0	15.0	14.0	14.5	1.0	.5	1.0
23	21.5	20.5	20.5	9.0	6.5	7.5	13.5	10.0	12.0	1.5	.5	1.0
24	20.5	20.0	20.0	8.5	7.0	8.0	11.0	8.0	9.5	2.0	.5	1.0
25	20.0	19.0	19.5	8.5	6.5	7.5	13.5	11.0	12.0	3.5	1.0	2.0
26	20.0	18.5	19.5	9.0	6.5	8.0	11.5	9.0	10.5	3.0	1.5	2.0
27	20.0	18.0	19.0	12.0	8.5	10.0	12.5	11.0	11.5	4.0	.5	2.0
28	22.0	20.0	21.0	14.5	12.0	13.0	13.5	11.0	12.5	4.5	3.0	4.0
29	24.0	21.0	21.5	12.5	9.0	10.5	15.0	12.5	13.5	4.5	2.5	3.5
30	21.5	20.5	20.5	9.5	6.5	8.0	15.5	13.0	14.5	5.0	2.0	3.5
31	21.0	20.0	20.5	---	---	---	15.0	13.5	14.5	8.5	5.0	7.0
MONTH	24.0	12.5	18.5	20.5	6.0	11.5	16.0	2.5	10.5	16.5	.5	5.0

CAPE FEAR RIVER BASIN

0210789100 GROVE CREEK AT KENANSVILLE, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	8.5	10.0	11.0	9.0	10.0	---	---	---	20.0	17.0	18.5
2	11.5	9.5	10.5	14.5	10.0	12.0	---	---	---	19.5	18.0	18.5
3	9.0	7.0	8.0	14.5	10.0	12.0	---	---	---	19.5	16.0	18.5
4	7.0	5.0	6.0	14.5	11.5	13.0	---	---	---	16.5	14.0	15.5
5	5.0	4.5	4.5	18.5	14.0	15.5	---	---	---	17.0	14.5	15.5
6	6.0	5.0	5.5	14.5	10.5	13.0	19.5	17.0	18.5	19.5	16.0	17.5
7	7.0	5.5	6.0	13.0	7.5	10.5	19.0	14.5	16.5	21.0	18.5	19.5
8	5.5	3.0	4.0	16.0	10.0	13.0	16.5	13.5	15.0	19.5	17.5	19.0
9	4.5	1.0	2.5	15.0	13.5	14.0	14.0	10.0	13.0	17.5	16.5	17.0
10	6.0	1.0	3.5	15.0	10.5	13.0	12.5	8.5	11.0	19.5	17.5	18.5
11	8.5	2.5	5.0	13.0	9.5	11.5	15.0	8.5	12.0	19.0	18.0	18.5
12	10.5	6.5	8.5	18.5	12.0	14.5	18.0	12.5	15.5	20.0	18.5	19.5
13	6.5	4.5	5.5	16.0	11.0	14.0	17.0	14.5	16.0	22.0	19.0	20.5
14	7.0	4.0	5.5	18.0	12.5	15.0	17.0	16.0	16.5	23.0	20.5	21.5
15	8.0	5.0	6.5	17.0	13.5	15.0	17.5	16.0	16.5	22.5	21.0	22.0
16	7.5	3.0	5.0	14.0	9.5	12.0	18.5	16.0	17.0	22.0	21.0	21.5
17	8.0	3.0	5.5	14.5	12.0	13.0	19.5	15.0	16.5	21.0	20.0	20.5
18	8.5	4.0	6.5	12.5	9.0	11.0	19.5	13.0	16.0	20.0	18.5	19.5
19	9.5	5.5	7.5	12.0	6.0	9.0	20.0	15.0	17.5	19.5	16.5	18.5
20	9.0	7.0	8.5	14.5	7.5	11.0	21.0	16.0	19.0	19.5	17.0	18.5
21	10.0	5.0	7.5	12.5	10.0	11.5	21.0	16.5	19.0	21.0	19.0	20.0
22	12.0	7.5	10.0	12.5	9.5	11.0	21.0	17.5	19.5	21.5	20.0	20.5
23	14.0	9.5	12.0	13.5	11.5	12.5	20.5	19.0	20.0	22.5	20.5	21.5
24	17.0	12.0	14.5	15.0	11.5	13.0	20.0	18.5	19.5	22.0	20.5	21.5
25	15.5	14.5	15.0	14.5	11.5	12.5	21.0	19.0	20.0	20.0	18.5	19.5
26	15.5	14.0	14.5	15.0	8.5	12.0	20.0	18.0	19.0	20.0	17.5	19.0
27	17.0	14.0	15.0	14.0	10.5	11.5	20.5	18.0	20.0	21.0	18.5	19.5
28	14.0	11.0	12.5	---	---	---	21.0	19.5	20.5	---	---	---
29	---	---	---	---	---	---	20.5	19.0	20.0	---	---	---
30	---	---	---	---	---	---	19.5	16.5	18.0	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	17.0	1.0	8.0	18.5	6.0	12.5	21.0	8.5	17.5	23.0	14.0	19.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	22.5	21.0	21.5	26.5	25.0	25.5	23.0	22.0	22.5
2	---	---	---	23.5	21.5	22.5	25.0	22.5	23.5	23.0	21.5	22.5
3	---	---	---	25.0	21.5	23.0	23.0	21.5	22.0	24.0	22.5	23.0
4	24.5	22.5	23.5	25.0	22.0	23.5	22.5	19.5	21.0	24.5	23.0	23.5
5	24.5	22.5	23.5	25.5	22.0	23.5	22.5	20.0	21.0	24.5	22.5	23.5
6	24.0	22.5	23.0	25.5	22.5	24.0	23.0	21.5	22.0	25.0	23.0	23.5
7	23.5	22.5	22.5	25.5	23.5	24.5	23.5	22.0	23.0	25.0	23.0	24.0
8	23.0	21.5	22.5	26.5	22.5	24.0	24.5	22.5	23.0	25.0	23.0	24.0
9	24.5	22.0	23.0	26.5	22.5	24.0	23.5	22.5	23.0	24.5	22.5	24.0
10	26.0	23.5	24.5	27.5	23.5	25.0	24.0	22.5	23.5	25.0	23.0	24.0
11	26.5	24.5	25.5	26.0	23.0	24.5	25.0	22.5	23.5	25.0	21.5	24.0
12	25.5	24.5	25.0	25.0	23.0	24.0	24.5	22.5	23.5	24.5	21.0	23.0
13	24.5	21.0	22.5	25.5	22.5	24.0	25.0	23.0	24.0	22.0	19.0	20.5
14	21.0	17.5	19.5	26.0	23.0	24.5	25.0	23.0	24.0	18.5	16.0	17.5
15	21.5	19.0	20.0	26.5	22.5	24.0	25.0	23.0	24.5	18.0	15.5	16.5
16	22.0	20.5	21.0	24.5	24.0	24.0	25.5	23.5	24.5	18.0	15.5	17.0
17	23.5	20.5	22.0	24.5	22.5	23.5	25.0	24.0	24.5	19.0	16.0	17.5
18	25.5	23.0	24.0	24.5	22.5	23.5	25.5	23.0	24.5	19.5	16.5	18.0
19	25.0	23.5	24.0	24.0	21.0	22.5	24.5	23.5	24.0	20.0	17.5	19.0
20	24.5	22.5	23.0	26.0	21.5	23.0	25.0	23.0	24.0	20.5	19.0	20.0
21	23.0	20.0	21.5	27.5	23.0	24.5	24.5	23.5	24.0	20.5	19.0	20.0
22	23.0	20.0	21.5	26.5	23.5	24.5	24.0	22.5	23.0	20.5	20.0	20.0
23	23.0	20.0	21.5	24.5	22.5	23.5	24.0	22.0	23.0	20.5	19.5	20.0
24	24.5	20.5	22.5	23.0	22.0	22.5	22.5	20.5	21.5	20.5	19.5	20.0
25	25.5	22.5	24.0	24.5	22.5	23.0	24.0	21.5	22.5	22.0	20.5	21.0
26	26.0	23.0	24.0	25.0	23.0	24.0	25.0	22.0	23.5	20.5	20.0	20.5
27	23.5	20.0	22.0	25.0	22.5	24.0	25.0	22.5	23.5	22.0	19.5	20.5
28	23.0	20.0	21.5	24.0	23.0	23.5	23.5	22.5	23.0	19.5	17.5	18.5
29	23.0	19.5	21.5	23.5	23.0	23.0	24.5	22.0	23.0	18.5	16.0	17.0
30	22.5	21.0	21.5	25.0	22.5	23.5	24.0	22.5	23.0	19.0	16.5	17.5
31	---	---	---	25.5	23.0	24.5	23.0	22.0	22.5	---	---	---
MONTH	26.5	17.5	22.5	27.5	21.0	23.5	26.5	19.5	23.5	25.0	15.5	21.0
YEAR	27.5	.5	16.									

0210789120 GROVE CREEK NEAR KENANSVILLE, NC

LOCATION.--Lat 34°58'25", long 77°54'50", Duplin County, Hydrologic Unit 03030007, 3.0 miles above mouth, and 2.7 miles east of Kenansville.

DRAINAGE AREA.--35.5 mi².

PERIOD OF RECORD.--September 1983 to current year.

REMARKS.--Station operated to define stream quantity and quality in the Grove Creek basin.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT											
24...	1445	13	105	6.3	20.0	769	6.0	5.9	1.5	360	650
DEC											
18...	1315	15	99	6.1	12.0	764	6.0	7.2	1.2	--	--
FEB											
01...	1230	95	75	6.0	9.0	755	8.5	9.1	1.3	260	K8800
13...	1220	280	65	6.5	4.5	755	12	10.5	1.8	1200	3200
21...	1030	82	75	6.4	6.0	775	5.8	11.2	1.3	600	6000
MAR											
11...	1240	19	92	6.2	10.5	765	5.8	10.0	1.2	K130	360
18...	1210	34	80	6.0	9.5	760	7.6	9.5	1.2	--	--
APR											
05...	1345	20	102	6.5	19.0	761	6.0	9.1	1.1	3800	4600
24...	1330	6.4	98	5.9	20.0	758	5.8	5.9	1.5	160	1200
MAY											
13...	1430	9.1	99	6.3	20.5	760	5.8	5.8	1.6	580	740
JUN											
10...	1230	3.8	102	5.7	24.0	760	12	6.5	1.6	K80	260
AUG											
02...	1320	173	80	5.4	22.5	760	15	6.0	1.7	--	--
05...	1340	13	122	5.7	20.0	765	8.0	7.4	1.4	380	1100
27...	1300	18	105	6.4	23.0	768	5.7	7.6	1.3	340	2800
SEP											
04...	1230	4.7	125	6.4	23.5	760	5.3	6.5	1.7	300	840
10...	1300	2.9	148	6.5	24.0	760	4.8	6.1	1.8	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

0210789120 GROVE CREEK NEAR KENANSVILLE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT											
24...	7.5	3.2	5.0	11	88	.12	3.0	.48	.020	.50	.050
DEC											
18...	8.2	2.1	6.3	11	72	.10	2.9	--	<.010	.80	.050
FEB											
01...	5.5	2.1	7.0	9.3	66	.09	17	.79	.010	.80	.050
13...	4.4	2.2	7.4	7.3	64	.09	48	1.1	.020	1.1	.030
21...	6.0	1.6	7.9	9.5	61	.08	14	--	<.010	1.3	<.010
MAR											
11...	--	--	--	--	--	--	--	1.4	.020	1.4	.070
18...	6.8	1.7	6.2	10	68	.09	6.2	1.3	.040	1.3	.100
APR											
05...	7.9	3.2	7.9	5.9	79	.11	4.3	1.6	.110	1.7	1.10
24...	8.0	2.1	6.3	9.7	74	.10	1.3	1.4	.030	1.4	.770
MAY											
13...	8.4	2.7	7.2	8.6	72	.10	1.8	1.5	.040	1.5	.140
JUN											
10...	10	2.5	10	11	79	.11	.81	.78	.020	.80	.120
AUG											
02...	7.3	2.2	17	7.4	87	.12	41	--	<.010	.40	.030
05...	12	2.5	16	12	105	.14	3.7	--	<.010	2.0	.070
27...	9.2	2.3	8.5	10	81	.11	3.8	--	<.010	1.1	.060
SEP											
04...	11	2.5	7.7	11	97	.13	1.2	1.7	.020	1.7	.100
10...	13	3.9	8.6	12	115	.16	.90	2.6	.010	2.6	.110

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT											
24...	.95	1.0	1.5	6.6	.250	.77	.220	.160	12	7	.24
DEC											
18...	.35	.40	1.2	5.3	.120	.37	.100	.100	8.3	3	.12
FEB											
01...	.25	.30	1.1	4.9	.130	.40	.050	.040	12	5	1.3
13...	.57	.60	1.7	7.5	.110	.34	.030	.040	12	13	9.8
21...	--	.50	1.8	8.0	.040	.12	<.010	.040	7.8	4	.89
MAR											
11...	.63	.70	2.1	9.3	.100	.31	.080	.070	6.8	4	.21
18...	.60	.70	2.0	8.9	.460	1.4	--	--	5.2	4	.37
APR											
05...	.30	1.4	3.1	14	.430	1.3	.290	.240	8.2	12	.65
24...	1.3	2.1	3.5	15	.350	1.1	.260	.200	6.9	20	.35
MAY											
13...	.46	.60	2.1	9.3	.320	.99	.240	.210	7.7	29	.71
JUN											
10...	.48	.60	1.4	6.2	.250	.77	.260	.240	9.9	9	.09
AUG											
02...	.77	.80	1.2	5.3	.150	.46	.040	.060	22	15	7.0
05...	.93	1.0	3.0	13	.180	.55	.140	.160	10	3	.11
27...	1.4	1.5	2.6	12	.180	.55	.160	.120	13	2	.09
SEP											
04...	1.2	1.3	3.0	13	.250	.77	.230	.240	6.9	1	.01
10...	.29	.40	3.0	13	.550	1.7	.520	.510	5.3	3	.02

02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC

LOCATION.--Lat 34°49'40", long 77°50'00", Duplin County, Hydrologic Unit 03030007, on right bank 540 ft downstream from bridge on State Highway 41, 0.5 mi downstream from Muddy Creek, and 1.2 mi west of Chinquapin.

DRAINAGE AREA.--599 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1940 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 17.28 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are fair.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--45 years, 728 ft^3/s, 16.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,400 ft^3/s July 6, 1962, gage height, 20.16 ft; minimum, 5.3 ft^3/s Oct. 10, 11, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 22.6 ft at old bridge site 1,000 ft upstream from gage. Flood in 1928 reached a stage of 0.8 ft lower than that in 1908, from information by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,230 ft^3/s Feb. 14, gage height, 11.76 ft; minimum discharge, 8.9 ft^3/s July 2; minimum gage height, 1.14 ft July 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	247	251	e125	833	977	460	82	32	9.4	643	146
2	1090	234	271	e120	1040	941	403	77	29	9.2	593	128
3	1080	214	290	e150	1270	916	352	75	25	9.3	978	112
4	986	199	325	e300	1400	802	314	75	23	16	1110	96
5	832	218	344	e610	1480	843	285	83	24	17	1020	83
6	685	247	420	e680	1820	792	263	87	23	15	805	73
7	572	258	494	e700	2200	720	246	79	24	13	517	64
8	482	253	515	e740	2380	654	226	73	25	13	306	56
9	409	237	513	e760	2410	598	209	70	29	11	400	50
10	349	217	486	e780	2340	553	193	68	33	11	515	45
11	300	200	458	e880	2140	515	182	66	39	21	574	40
12	262	189	429	e940	2330	486	177	73	34	21	462	36
13	234	181	e410	e850	2900	456	174	95	26	16	310	32
14	213	172	e400	e700	3210	427	184	88	20	14	218	28
15	198	165	e350	e540	3130	402	209	83	17	14	163	25
16	186	159	e330	e490	2930	377	255	68	17	16	132	23
17	175	154	e300	e520	2640	406	335	56	18	16	115	22
18	167	151	e280	e600	2310	491	348	53	18	27	130	20
19	164	147	e260	e660	1950	505	339	49	21	23	188	19
20	161	145	e240	e640	1640	478	302	49	22	21	330	17
21	162	146	e220	e580	1490	436	256	50	18	20	556	17
22	159	147	e210	e470	1410	467	219	53	16	19	778	18
23	153	148	e200	e420	1330	713	202	127	14	21	824	20
24	149	147	e185	e400	1250	948	177	116	13	64	663	22
25	147	147	e175	e390	1170	968	144	101	13	63	424	28
26	146	148	e165	383	1090	1030	126	82	12	143	347	35
27	143	149	e155	371	1050	1010	114	67	11	209	334	120
28	143	150	e150	360	1040	935	105	54	10	342	283	224
29	162	176	e142	392	---	822	95	45	9.7	547	219	262
30	209	218	e135	422	---	692	87	38	9.4	771	181	233
31	237	---	e130	516	---	563	---	35	---	793	165	---
TOTAL	11375	5563	9241	16489	52183	20923	6989	2217	625.1	3304.9	14283	2094
MEAN	367	185	298	532	1864	675	233	71.5	20.8	107	461	69.8
MAX	1090	258	515	940	3210	1030	460	127	39	793	1110	262
MIN	143	145	130	120	833	377	87	35	9.4	9.2	115	17
CFSM	.61	.31	.50	.89	3.11	1.13	.39	.12	.03	.18	.77	.12
IN.	.71	.35	.57	1.02	3.24	1.30	.43	.14	.04	.21	.89	.13

CAL YR 1984 TOTAL 286719 MEAN 783 MAX 6820 MIN 43 CFSM 1.31 IN. 17.81
WTR YR 1985 TOTAL 145287.0 MEAN 398 MAX 3210 MIN 9.2 CFSM .66 IN. 9.02

e Estimated

02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/04	1200	WATER	0	6.79	987	138	6.40	15.0	3.6	8.7	80
84/10/24	1115	WATER	0	2.64	149	230	7.10	19.0		6.6	20
84/11/26	1345	WATER	0	2.54	147	281	7.20	8.0		11.4	40
84/12/12	1220	WATER	0	4.25	429	146	6.90	9.0	2.4	10.8	30
85/01/16	1330	WATER	0	4.57	489	180		.0		12.2	50
85/02/11	1310	WATER	0	10.16	2130	139	6.20	2.0		13.4	30
85/03/13	1100	WATER	0	4.44	457	185	6.80	10.0	4.0	7.0	120
85/04/09	1325	WATER	0	3.05	209	139		12.0		9.5	20
85/05/02	1045	WATER	0	2.07	77	218		17.0		7.9	50
85/06/10	1145	WATER	0	1.62	35	324	7.20	23.0	2.7	8.0	30
85/07/09	1110	WATER	0	1.20	12	1070	7.30	24.0		6.5	10
85/08/12	1100	WATER	0.1	4.30	470	183	6.40	24.0		6.7	120
85/09/09	1320	WATER	0.1			396	7.10	27.0	3.0	7.4	10

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/04	1200	WATER	0	11	4	150	.47	.010	.500	.090	.030
84/10/24	1115	WATER	0	36	3	160					
84/11/26	1345	WATER	0	24	1	150					
84/12/12	1220	WATER	0		3	140	.58	.130	.400	.090	.040
85/01/16	1330	WATER	0		5	100					
85/02/11	1310	WATER	0	5	1	100					
85/03/13	1100	WATER	0	19	8	120	1.10	.040	.500	.130	.030
85/04/09	1325	WATER	0		2	140					
85/05/02	1045	WATER	0		3	140					
85/06/10	1145	WATER	0	41	11	210	.64	.020	.400	.180	.100
85/07/09	1110	WATER	0	50	1	580					
85/08/12	1100	WATER	0.1	11	5	160					
85/09/09	1320	WATER	0.1	33	2	260	.88	.050	.400	.150	.050

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/04	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
84/12/12	1220	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/13	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/10	1145	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/09	1320	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02108548 LITTLE ROCKFISH CREEK AT WALLACE, NC

LOCATION.--Lat 34°44'02", long 77°58'03", Duplin County, Hydrologic Unit 03030007, on right bank, 0.4 mi downstream from bridge on State Highway 41, 0.6 mi east-southeast of Wallace, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--7.8 mi^2.

PERIOD OF RECORD.--September 1976 to current year.

REVISED RECORDS.--WDR NC-78-1: Drainage area.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 27.58 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--9 years, 10.7 ft^3/s, 18.56 in/yr.

EXTREMES FOR PERIOD OF PERIOD.--Maximum discharge, 347 ft^3/s Sept. 14, 1984, gage height, 7.72 ft; no flow June 19, 22, Sept. 27-30, Oct. 10-28, Nov. 1-3, 7, 20-22, 1978, Oct. 14-16, 20-23, 1981, Oct. 21, Nov. 3, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 170 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	1145	*290	*6.90	Aug. 1	1945	248	6.25
July 11	1945	184	5.13				

Minimum discharge, 0.10 ft^3/s June 14, 15, 19, gage height, 2.20 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	1.3	.86	.79	17	13	3.8	.22	.42	.17	37	.41
2	15	1.0	.92	.79	23	15	3.1	.25	.47	.24	107	.35
3	11	.88	1.8	5.6	26	13	2.6	2.0	.43	.31	23	.29
4	8.2	.88	1.2	7.9	17	11	2.3	1.1	.48	.27	9.8	.30
5	6.4	1.1	4.4	6.1	25	9.7	1.8	1.0	.55	.35	5.6	.33
6	5.2	.78	5.4	4.0	104	8.8	1.6	1.3	1.2	.38	3.9	.30
7	4.4	.57	3.9	3.0	58	7.6	1.3	1.6	.26	.32	2.9	.29
8	3.5	.52	2.7	2.3	35	7.1	1.1	2.5	1.3	.33	24	.31
9	3.0	.50	2.0	1.9	25	6.8	.90	3.3	.86	.37	50	.30
10	2.5	.48	1.6	4.6	20	6.5	.77	2.1	.39	.41	29	.30
11	1.9	.55	1.3	5.3	17	5.9	.71	1.8	.23	17	17	.30
12	1.5	.60	1.2	4.5	207	5.6	.70	5.4	.20	3.3	9.4	.29
13	1.2	.40	1.1	3.5	80	5.2	.73	1.0	.16	1.8	7.1	.31
14	1.2	.34	1.0	2.9	43	4.6	1.2	1.0	.11	1.2	4.6	.33
15	.98	.35	.94	2.5	32	4.1	1.1	.52	.12	.85	3.3	.34
16	.79	.35	1.3	2.1	26	3.7	7.8	.65	2.4	3.1	2.5	.33
17	.68	.34	1.1	4.9	21	8.8	14	.44	.47	3.4	2.1	.33
18	.67	.34	.94	6.5	17	8.2	5.4	.50	.15	2.5	3.1	.33
19	.65	.48	.94	5.1	15	6.1	2.8	.48	2.4	1.8	1.9	.33
20	.63	.46	1.0	4.2	24	4.9	1.8	1.5	.23	.82	1.6	.35
21	.59	.32	1.1	3.1	29	4.4	1.2	.86	.19	.49	1.9	.35
22	.55	.32	.92	2.3	23	16	.80	6.7	.22	1.0	1.0	1.6
23	.55	.32	.89	2.3	18	20	.56	11	.27	.61	.79	.38
24	.55	.31	.82	2.4	16	12	.46	5.2	.30	1.2	.57	.26
25	.52	.31	.87	2.9	14	12	.33	2.2	.31	22	.41	.26
26	.46	.31	.80	2.4	13	9.6	.24	1.0	.31	19	.49	5.3
27	.49	.31	.92	2.1	14	8.0	.24	.58	.31	11	.36	2.3
28	1.3	2.3	1.2	2.9	13	7.0	.21	.32	.35	20	.32	.49
29	3.7	.62	.85	3.4	---	6.0	.20	.37	.32	40	.30	.45
30	2.5	.90	.85	3.2	---	5.3	.21	.39	.58	22	1.6	.45
31	1.7	---	.78	13	---	4.5	---	.40	---	9.1	.40	---
TOTAL	100.31	18.24	45.60	118.48	972	260.4	59.94	57.68	15.99	185.32	352.94	18.26
MEAN	3.24	.61	1.47	3.82	34.7	8.40	2.00	1.86	.53	5.98	11.4	.61
MAX	18	2.3	5.4	13	207	20	14	11	2.4	40	107	5.3
MIN	.46	.31	.78	.79	13	3.7	.20	.22	.11	.17	.30	.26
CFSM	.41	.08	.19	.49	4.43	1.07	.26	.24	.07	.76	1.46	.08
IN.	.48	.09	.22	.56	4.62	1.24	.28	.27	.08	.88	1.68	.09

CAL YR 1984 TOTAL 3875.22 MEAN 10.6 MAX 301 MIN .18 CFSM 1.35 IN. 18.41
WTR YR 1985 TOTAL 2205.16 MEAN 6.04 MAX 207 MIN .11 CFSM .77 IN. 10.48

WACCAMAW RIVER BASIN

02109500 WACCAMAW RIVER AT FREELAND, NC

LOCATION.--Lat 34°05'43", long 78°32'55", Brunswick County, Hydrologic Unit 03040206, on left bank 150 ft downstream from New Britton Bridge on State Highway 130, 1 mi southwest of Freeland, 7 mi downstream from Juniper Creek, and 117 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--680 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1939 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 15.52 ft above National Geodetic Vertical Datum of 1929. Prior to July 15, 1943, nonrecording gage 150 ft upstream at same datum. Auxiliary nonrecording gage 3.3 mi downstream from base gage Oct. 7, 1949 to July 14, 1952. Since July 15, 1952, auxiliary water-stage recorder at same site and datum.

REMARKS.--Records good above 10 ft³/s and fair below.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 711 ft³/s, 14.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft³/s Sept. 25, 1955; maximum gage height, 16.63 ft Sept. 26, 1955; minimum discharge, 0.1 ft³/s Aug. 30, Sept. 9, 10, 28, Oct. 4-14, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,460 ft³/s Feb. 16, gage height, 14.39 ft; minimum daily, 11 ft³/s July 13-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1790	178	88	118	244	1640	356	45	60	31	607	552
2	1740	169	86	115	281	1550	333	42	63	38	626	613
3	1650	160	90	117	353	1460	315	39	61	36	614	643
4	1550	157	98	143	410	1370	296	38	54	28	583	619
5	1430	160	102	170	454	1200	278	41	46	22	539	556
6	1260	159	110	184	610	1100	262	43	44	18	498	470
7	1070	153	115	192	827	1030	243	38	59	16	467	395
8	981	144	119	191	1040	966	223	34	77	14	456	328
9	884	136	120	198	1270	892	203	33	82	13	452	282
10	787	132	117	187	1510	824	187	34	77	13	501	247
11	712	128	114	191	1720	773	173	36	69	12	559	217
12	641	122	111	198	2250	726	161	e37	60	12	548	213
13	581	118	107	204	2730	674	148	e36	50	11	499	196
14	527	113	105	212	3150	629	138	e35	42	11	439	182
15	475	110	101	220	3390	584	142	e37	37	11	380	172
16	430	108	98	220	3440	540	138	e38	36	11	327	156
17	388	103	95	224	3370	509	133	e40	42	14	285	138
18	361	99	94	239	3230	497	141	e44	42	25	265	119
19	348	96	93	256	3040	494	145	e46	41	27	269	102
20	349	95	91	262	2890	483	136	e50	40	24	280	88
21	338	96	90	258	2750	460	123	e52	36	19	312	75
22	318	97	89	245	2610	441	110	49	31	15	416	66
23	298	97	87	227	2470	447	98	48	27	13	425	59
24	281	94	85	214	2310	458	89	45	23	12	418	53
25	264	89	84	208	2150	463	79	41	21	38	415	47
26	244	85	82	204	2000	457	71	38	19	145	449	43
27	226	82	86	201	1860	447	64	35	17	207	462	43
28	214	80	104	198	1740	431	58	33	15	242	442	41
29	199	84	116	202	---	410	51	30	13	300	417	38
30	191	89	121	210	---	390	47	41	15	427	392	34
31	189	---	121	222	---	374	---	51	---	542	467	---
TOTAL	20716	3533	3119	6222	54099	22719	4941	1249	1299	2347	13809	6787
MEAN	668	118	101	201	1932	733	165	40.3	43.3	75.7	445	226
MAX	1790	178	121	262	3440	1640	356	52	82	542	626	643
MIN	189	80	82	115	244	374	47	30	13	11	265	34
CFSM	.98	.17	.15	.30	2.84	1.08	.24	.06	.06	.11	.65	.33
IN.	1.13	.19	.17	.34	2.96	1.24	.27	.07	.07	.13	.76	.37

CAL YR 1984 TOTAL 250714.8 MEAN 685 MAX 3200 MIN 9.8 CFSM 1.01 IN 13.72
WTR YR 1985 TOTAL 140840.0 MEAN 386 MAX 3440 MIN 11 CFSM .57 IN 7.70

e Estimated

02109500 WACCAMAW RIVER AT FREELAND, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/30	1500	WATER	0	4.45	192	175	5.70	20.0		5.5	30
84/11/14	1430	WATER	0	3.25	112	148	5.30	9.0		9.5	10K
84/12/10	1200	WATER	0	3.34	117	52	4.40	11.0	2.5	10.4	10K
85/01/23	1500	WATER	0	3.01	220	78	5.40	2.0K		11.7	10K
85/02/04	1300	WATER	0	7.05	416	559	5.40	6.0		8.8	70
85/03/12	1150	WATER	0	9.58	726	125	5.30	11.0	3.7	6.8	30
85/04/10	1250	WATER	0	4.30	182	68		10.0		8.2	10K
85/05/06	1210	WATER	0	1.93	42	123	6.00	17.0		8.0	10K
85/06/06	1110	WATER	0	1.88	40	74	5.50	24.0	2.8	6.4	20
85/07/11	1100	WATER	0	1.00	12	96	5.40	27.0		6.1	60
85/08/13	1115	WATER	0.1	7.85	504	145	5.00	23.0		5.6	40
85/09/16	1410	WATER	0.1			155	5.90	20.0	2.6	7.1	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	1500	WATER	0	9	8	150					
84/11/14	1430	WATER	0	5	1	100					
84/12/10	1200	WATER	0		2	110	.05	.040	.600	.020	.010K
85/01/23	1500	WATER	0	4	1K	86					
85/02/04	1300	WATER	0	10	7	97					
85/03/12	1150	WATER	0	4	3	120	.02	.010	.600	.010	.010K
85/04/10	1250	WATER	0		7	180					
85/05/06	1210	WATER	0	6	4	130					
85/06/06	1110	WATER	0	3	4	98	.10	.120	.600	.030	.010K
85/07/11	1100	WATER	0	5	3						
85/08/13	1115	WATER	0.1	3	3	130					
85/09/16	1410	WATER	0.1	10	5	210	.06	.160	.900	.020	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/10	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/12	1150	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20
85/06/06	1110	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/16	1410	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02111000 YADKIN RIVER AT PATTERSON, NC

LOCATION.--Lat 35°59'29", long 81°33'30", Caldwell County, Hydrologic Unit 03040101, on left bank 200 ft upstream from bridge on State Highway 268, 0.4 mi upstream from Warrior Creek, 0.5 mi south of Patterson, 2 mi downstream from Walnut Branch, and at mile 416.

DRAINAGE AREA.--28.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1940(m), 1947-48(M). WSP 1553: 1948(P). WDR NC-80-1: 1975(P), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,211.47 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage at present site, at datum 1.00 ft higher. Prior to Oct. 20, 1970, at datum 1.00 ft higher.

REMARKS.--Records good. U. S. Army Corps of Engineers rain gage and gage height radio telemeter and satellite telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 49.9 ft^3/s, 23.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,200 ft^3/s Aug. 13, 1940, gage height, 12.70 ft, datum then in use, from rating curve extended above 1,400 ft^3/s on basis of computation of peak flow over dam 1 mi upstream at gage heights 4.58 ft, 6.60 ft, 7.70 ft, 12.70 ft; minimum observed, 3.0 ft^3/s May 15, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 17	1830	595	3.54	Aug. 28	2300	*681	*3.80

Minimum discharge, 7.7 ft^3/s Jan. 13, result of freezeup; minimum daily, 12 ft^3/s June 27-29, July 9-11, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	21	27	19	68	32	25	28	20	16	37	48
2	26	21	25	25	89	32	24	28	23	17	35	41
3	22	20	24	43	60	31	23	28	23	15	28	36
4	20	23	23	60	45	30	22	25	20	14	23	33
5	19	27	25	43	41	29	22	25	24	15	21	31
6	18	23	31	33	40	27	41	23	23	14	19	29
7	18	21	27	30	38	27	28	23	27	17	26	27
8	19	19	24	27	34	27	26	23	33	14	50	26
9	19	19	23	25	35	27	25	22	23	12	54	26
10	19	19	22	25	31	25	24	23	46	12	36	25
11	19	40	21	25	35	25	24	24	54	12	43	23
12	19	27	21	23	145	25	23	23	38	19	34	23
13	19	24	20	24	73	25	23	24	26	13	32	23
14	19	21	20	24	54	24	24	22	23	12	33	21
15	18	20	20	22	46	23	46	39	21	17	23	20
16	19	19	20	24	41	23	84	52	21	31	21	19
17	20	19	19	25	37	23	70	30	20	24	244	19
18	20	18	19	23	35	22	54	29	18	18	221	18
19	20	18	19	23	33	21	46	27	18	16	94	18
20	21	19	19	20	33	21	40	25	17	16	125	17
21	26	18	20	13	32	21	37	25	16	14	116	17
22	34	18	20	20	32	31	33	25	16	15	64	17
23	25	18	20	23	32	38	32	24	15	18	49	17
24	29	18	19	23	32	31	67	28	15	17	43	17
25	25	17	19	23	33	28	52	27	14	34	49	16
26	24	17	19	e23	40	26	38	23	13	57	41	16
27	22	17	18	e23	35	25	34	21	12	72	66	15
28	21	72	19	21	33	24	35	20	12	44	123	15
29	22	40	19	24	---	24	31	20	12	38	193	14
30	23	30	19	21	---	24	30	24	13	32	85	14
31	21	---	19	24	---	23	---	21	---	31	61	---
TOTAL	681	703	660	801	1282	814	1083	801	656	696	2089	681
MEAN	22.0	23.4	21.3	25.8	45.8	26.3	36.1	25.8	21.9	22.5	67.4	22.7
MAX	35	72	31	60	145	38	84	52	54	72	244	48
MIN	18	17	18	13	31	21	22	20	12	12	19	14
CFSM	.76	.81	.74	.90	1.59	.91	1.25	.90	.76	.78	2.34	.79
IN.	.88	.91	.85	1.03	1.66	1.05	1.40	1.03	.85	.90	2.70	.88

CAL YR 1984	TOTAL	19491	MEAN	53.3	MAX	412	MIN	17	CFSM	1.85	IN. 25.18
WTR YR 1985	TOTAL	10947	MEAN	30.0	MAX	244	MIN	12	CFSM	1.04	IN. 14.14

e Estimated

02111000 YADKIN RIVER AT PATTERSON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/23	1140	WATER	0	1.01	23	53	7.70	.0		14.2	20
85/02/07	1320	WATER	0	1.19	37	55	6.50	4.0	1.0	12.8	10K
85/03/13	1245	WATER	0	1.04	25	39	6.20	10.0		12.0	20
85/04/18	1230	WATER	0	1.34	54	40	6.60	15.0		11.8	40
85/05/21	1230	WATER	0	1.02	23	46	6.90	19.0	3.7	7.6	450
85/06/18	1245	WATER	0	.94	18	36	6.60	22.0		8.2	10K
85/07/18	1145	WATER	0	.94	18	32	6.60	22.0		8.6	210
85/08/19	1355	WATER	0.1	1.61	92	50	6.60	20.0	5.7	8.9	210
85/09/10	1200	WATER	0.1	1.05	25	68	6.20	21.0		8.6	930

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/23	1140	WATER	0	16	1	35	.21	.010	.100K	.010K	.010
85/02/07	1320	WATER	0	10	1K	56	.26	.010	.200	.020	.010K
85/03/13	1245	WATER	0	10	1K	70	.12	.020	.200	.010	.010K
85/04/18	1230	WATER	0	17	13	71	.25	.040	.300	.030	.010K
85/05/21	1230	WATER	0	15	10	71	.16	.070	.300	.030	.010K
85/06/18	1245	WATER	0	16	6	64					
85/07/18	1145	WATER	0	18	13	50	.10	.020	.200	.040	.010
85/08/19	1355	WATER	0.1	13	19	130	1.50	.020	.200	.040	.010K
85/09/10	1200	WATER	0.1	17	2	44	.13	.040	.200	.020	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/07	1320	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/21	1230	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/19	1355	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PEE DEE RIVER BASIN

02111180 ELK CREEK AT ELKVILLE, NC

LOCATION.--Lat 36°04'16", long 81°24'13", Wilkes County, Hydrologic Unit 03040101, on left bank 700 ft upstream from bridge on State Highway 268, in community of Elkville, and 3,400 ft upstream from mouth.

DRAINAGE AREA.--48.1 mi².

WATER DISCHARGE RECORDS

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,082.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. U. S. Army Corps of Engineers rain gage and gage height radio telemeters and satellite telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Deptartment of Natural Resources and Community Development.

AVERAGE DISCHARGE.--20 years, 103 ft³/s, 29.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s Nov. 6, 1977, gage height 9.58 ft from floodmarks, from rating curve extended above 3,200 ft³/s on basis of contracted-opening measurement at gage height 7.28 ft; minimum, 11 ft³/s Jan. 5, 1981, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 13, 1940 reached a stage of about 22 ft, discharge, about 70,000 ft³/s, on basis of several contracted-opening and slope-area measurements. A discharge of 6.0 ft³/s was measured Sept. 19, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	1930	*2,440	*4.55	No other peak greater than base discharge.			

Minimum discharge, 14 ft³/s Jan. 21, result of freezeup; minimum daily, 22 ft³/s Jan. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	38	55	35	131	e62	53	49	e45	e40	58	55
2	47	37	49	46	184	e60	46	49	e43	e38	59	50
3	e38	35	49	77	130	e59	44	51	e42	e30	e40	47
4	e35	40	45	120	93	57	43	47	e40	e28	e34	44
5	e34	50	49	98	83	56	43	45	e38	e30	e30	42
6	e34	40	60	73	78	53	80	43	e36	e33	e28	43
7	e35	36	50	64	71	51	60	42	e55	e35	32	38
8	e35	36	48	57	60	50	56	42	e40	e30	66	41
9	e35	35	47	54	66	50	55	41	e35	e28	69	40
10	e34	35	45	50	57	49	54	41	e79	e27	44	38
11	e34	72	45	48	59	47	53	48	140	e32	40	35
12	e34	47	43	46	270	47	51	48	72	e28	48	35
13	e34	41	42	45	140	47	50	45	56	e32	36	35
14	e34	38	42	49	99	47	50	47	49	e45	32	33
15	e34	36	40	43	82	46	108	53	45	e37	29	32
16	e34	36	40	45	72	45	214	e100	44	29	46	32
17	e34	35	40	48	66	44	149	e70	43	29	798	31
18	e34	34	40	44	62	42	110	e60	41	27	562	28
19	e34	39	39	43	60	42	91	e50	38	25	180	28
20	e34	38	40	38	61	42	80	e40	37	24	142	27
21	44	34	40	22	61	42	71	e38	33	24	155	27
22	55	33	40	33	61	62	64	e40	32	24	99	27
23	46	33	38	e37	e61	84	59	e40	e31	27	79	27
24	53	33	37	e37	e61	65	71	e80	e31	27	66	27
25	46	33	37	e36	e62	58	85	e65	e30	45	72	27
26	47	33	37	e36	86	53	65	e54	e29	70	65	27
27	39	33	35	35	e70	52	60	e48	e28	88	95	28
28	38	149	35	38	e65	50	61	e46	e28	61	88	28
29	53	92	35	39	---	50	56	e45	e30	58	74	28
30	43	63	35	40	---	50	53	e45	e34	50	71	28
31	40	---	35	47	---	48	---	e45	---	46	62	---
TOTAL	1240	1334	1312	1523	2451	1610	2135	1557	1324	1147	3299	1028
MEAN	40.0	44.5	42.3	49.1	87.5	51.9	71.2	50.2	44.1	37.0	106	34.3
MAX	69	149	60	120	270	84	214	100	140	88	798	55
MIN	34	33	35	22	57	42	43	38	28	24	28	27
CFSM	.83	.93	.88	1.02	1.82	1.08	1.48	1.04	.92	.77	2.20	.71
IN.	.96	1.03	1.01	1.18	1.90	1.25	1.65	1.20	1.02	.89	2.55	.80

CAL YR 1984 TOTAL 36282 MEAN 99.1 MAX 1090 MIN 30 CFSM 2.06 IN. 28.06
WTR YR 1985 TOTAL 19960 MEAN 54.7 MAX 798 MIN 22 CFSM 1.14 IN. 15.44

e Estimated

02111180 ELK CREEK AT ELKVILLE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
85/01/31	1320	WATER	0	1.01	47	21	6.90	1.0	1.6	13.3	50
85/02/25	1230	WATER	0	1.40	62	27	7.40	13.0		10.6	30
85/03/18	1230	WATER	0	.97	40	24	7.40	8.0		11.8	10
85/04/23	1320	WATER	0	1.09	60	29	7.40	21.0	3.2	9.2	70
85/05/28	1300	WATER	0	1.04	46	31	7.80	21.0		9.1	480
85/06/17	1245	WATER	0	.95	37	32	7.90	23.0		8.7	340
85/07/15	0855	WATER	0	.88	27	39	7.10	23.0	15.0	8.2	150
85/08/22	1300	WATER	0.1	1.23	91	35	7.40	20.0		8.8	360
85/09/23	1300	WATER	0.1	.88	27	34	7.70	21.0		8.9	130

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/31	1320	WATER	0	9	2	38	.23	.010	.100K	.010	.010K
85/02/25	1230	WATER	0	9	3	45					
85/03/18	1230	WATER	0	10	1K	40					
85/04/23	1320	WATER	0	12	12	58	.18	.020	.300	.030	.010K
85/05/28	1300	WATER	0	14	8	39					
85/06/17	1245	WATER	0	14	4	52					
85/07/15	0855	WATER	0	15	19	61	.07	.020	.200	.040	.010
85/08/22	1300	WATER	0.1	13	26	76					
85/09/23	1300	WATER	0.1	14	5	48					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/31	1320	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	1320	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/15	0855	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02111500 REDDIES RIVER AT NORTH WILKESBORO, NC

LOCATION.--Lat 36°10'29", long 81°10'09", Wilkes County, Hydrologic Unit 03040101, on left bank 550 ft upstream from bridge on Secondary Road 1517, 1.2 mi northwest of North Wilkesboro, 1.4 mi upstream from North Wilkesboro municipal dam, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--89.2 mi².

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1433: 1944. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 978.62 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Slight diurnal fluctuation at low flow during growing season. Several observations of water temperature were taken during the year.

AVERAGE DISCHARGE.--46 years, 145 ft³/s, 22.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft³/s Aug. 14, 1940, gage height, 22.02 ft, from rating curve extended above 3,600 ft³/s on basis of computation of peak flow over dam; minimum, 22 ft³/s Aug. 17, 1954, gage height, 0.63 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	2030	*2,280	*6.14	No other peak greater than base discharge.			

Minimum discharge, 37 ft³/s Jan. 20, result of freezeup; minimum daily, 40 ft³/s Sept. 28, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	91	95	74	220	97	91	81	74	66	61	70
2	96	90	91	85	273	95	81	82	73	66	60	68
3	91	87	93	139	170	92	80	87	75	56	54	65
4	89	106	88	207	125	91	79	78	68	54	51	63
5	88	111	95	147	115	90	78	76	70	53	49	61
6	87	94	115	110	114	87	116	75	70	53	49	61
7	88	90	93	99	112	86	89	73	104	59	55	59
8	91	87	91	92	96	86	84	73	98	49	73	61
9	91	87	89	87	97	87	84	72	72	46	71	64
10	88	87	88	86	94	84	82	75	66	48	57	57
11	87	123	88	84	94	85	81	77	76	48	107	54
12	86	95	86	80	369	85	80	77	69	44	78	53
13	85	89	85	e80	197	81	80	74	63	48	57	53
14	84	87	83	e80	146	82	80	88	61	75	55	50
15	84	87	83	77	128	81	117	99	60	70	51	50
16	84	86	81	e72	116	81	186	226	61	60	50	49
17	84	84	80	84	111	80	158	115	61	51	554	48
18	86	84	80	80	105	78	117	94	59	47	431	47
19	84	95	80	79	103	77	104	83	56	45	114	46
20	84	88	79	e68	103	78	97	78	55	44	85	45
21	86	84	81	e55	100	78	91	79	54	44	94	45
22	103	83	81	e70	98	111	87	93	54	49	75	44
23	93	83	77	e76	98	130	84	94	53	47	66	45
24	103	83	77	e78	98	99	100	128	52	48	65	45
25	111	83	77	e78	100	91	135	116	51	64	83	44
26	96	82	77	e78	123	87	96	91	50	125	77	42
27	90	82	75	e78	106	85	95	83	47	94	161	43
28	91	186	74	80	99	84	98	78	47	97	128	40
29	136	129	74	81	---	83	89	78	50	85	89	40
30	101	102	74	79	---	82	83	75	56	69	86	40
31	94	---	74	87	---	81	---	76	---	63	78	---
TOTAL	2914	2845	2604	2750	3710	2714	2922	2774	1905	1867	3164	1552
MEAN	94.0	94.8	84.0	88.7	133	87.5	97.4	89.5	63.5	60.2	102	51.7
MAX	153	186	115	207	369	130	186	226	104	125	554	70
MIN	84	82	74	55	94	77	78	72	47	44	49	40
CFSM	1.05	1.06	.94	.99	1.49	.98	1.09	1.00	.71	.67	1.14	.58
IN.	1.22	1.19	1.09	1.15	1.55	1.13	1.22	1.16	.79	.78	1.32	.65

CAL YR 1984 TOTAL 60236 MEAN 165 MAX 1020 MIN 74 CFSM 1.85 IN. 25.12
WTR YR 1985 TOTAL 31721 MEAN 86.9 MAX 554 MIN 40 CFSM .97 IN. 13.23

e Estimated

02112000 YADKIN RIVER AT WILKESBORO, NC

LOCATION.--Lat 36°09'09", long 81°08'45", Wilkes County, Hydrologic Unit 03040101, on right bank 150 ft upstream from bridge on State Highway 18 and 268 between North Wilkesboro and Wilkesboro, 150 ft downstream from Reddies River, 0.5 mi northeast of Wilkesboro, and 382 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--504 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1903 to June 1909, October 1920 to current year. Prior to October 1928, published as "at North Wilkesboro".

REVISED RECORDS.--WSP 1433: 1903-9, 1922, 1925-26(M), 1930, 1932, 1934, 1946-48(M), drainage area at former site. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 942.35 ft above National Geodetic Vertical Datum of 1929. Apr. 10, 1903 to June 30, 1909 and Oct. 17, 1920 to Apr. 10, 1929, nonrecording gage at site 1.2 mi downstream at different datum. Apr. 11, 1929 to Jan. 9, 1930, nonrecording gage at present site and datum. Datum used 1920-29 was about 1.2 ft lower than that used 1903-09.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by W. Kerr Scott Reservoir 5.5 mi. upstream since 1962 (station 02111391). U. S. Army Corps of Engineers gage height radio telemeter, gage height telephone telemeter and satellite telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--70 years (1903-8, 1920-85), 826 ft³/s, 22.26 in/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft³/s Aug. 14, 1940, gage height, 37.6 ft, from floodmarks, from rating curve extended above 20,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 86 ft³/s Dec. 4, 1965; minimum daily, 110 ft³/s Sept. 18, 19, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 34.5 ft present site and datum, from floodmark, discharge, 116,000 ft³/s, from rating curve extended as explained above.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,700 ft³/s Aug. 17, gage height, 7.00 ft; minimum, 205 ft³/s Dec. 4, July 23, 24, gage height, 1.80 ft; minimum daily, 291 ft³/s July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	568	485	495	453	600	571	476	429	518	415	393	650
2	508	458	500	470	780	569	466	430	519	430	403	532
3	510	459	505	575	589	568	462	447	514	403	409	566
4	493	499	480	677	676	543	458	430	502	399	405	596
5	501	499	523	574	845	540	459	406	496	396	398	561
6	497	502	508	520	749	545	522	480	489	394	397	541
7	478	470	501	517	638	570	481	397	536	406	403	534
8	464	453	498	533	613	571	469	394	527	386	513	523
9	461	458	499	543	604	575	467	396	456	381	449	494
10	462	482	497	538	605	572	462	402	447	384	435	482
11	462	495	513	527	617	563	461	433	469	384	525	462
12	460	483	510	499	1230	546	458	464	465	377	490	424
13	463	489	509	499	1520	534	457	452	455	380	456	432
14	462	483	507	499	1310	531	460	466	465	407	451	429
15	457	478	509	494	744	526	497	528	467	418	444	428
16	466	477	511	488	666	527	560	762	471	404	440	414
17	481	476	497	511	647	529	546	728	463	382	1480	406
18	478	470	488	500	598	508	499	649	458	374	1230	404
19	474	475	482	500	558	473	485	543	455	360	991	400
20	473	464	465	490	562	474	476	529	451	320	1310	396
21	479	457	485	446	567	473	483	533	450	319	1320	373
22	483	459	466	482	562	535	492	574	451	312	1270	355
23	462	460	464	488	567	556	498	571	452	291	940	351
24	482	460	459	493	568	513	517	576	445	295	580	346
25	478	455	461	486	569	494	589	527	441	328	770	345
26	465	455	454	451	679	497	549	540	427	420	670	342
27	456	450	453	450	665	499	547	534	382	401	820	343
28	463	590	453	461	574	481	549	523	382	553	840	334
29	505	520	455	458	—	473	499	521	469	394	873	339
30	476	485	458	445	—	474	465	516	406	369	910	335
31	501	—	452	456	—	472	—	519	—	399	818	—
TOTAL	14868	14346	15037	15531	19990	16302	14817	15621	13928	11881	21833	13137
MEAN	480	478	485	501	714	526	494	504	464	383	704	438
MAX	568	590	523	677	1520	575	589	762	536	553	1480	650
MIN	456	450	452	445	558	472	457	396	382	291	393	334
(†)	-1	9	-27	0	61	-40	40	-16	-77	34	66	-129
MEAN‡	479	487	458	501	775	486	534	488	387	417	770	309
CFSM‡	.95	.97	.91	.99	1.54	.96	1.06	.97	.77	.83	1.53	.61
IN.‡	1.10	1.08	1.05	1.14	1.60	1.11	1.18	1.12	.86	.96	1.76	.68

CAL YR 1984 TOTAL 330630 MEAN 903 MAX 4340 MIN 450 MEAN‡ 898 CFSM‡ 1.78 IN.‡ 24.27
WTR YR 1985 TOTAL 187291 MEAN 513 MAX 1520 MIN 291 MEAN‡ 506 CFSM‡ 1.00 IN.‡ 13.64

† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir; furnished by U. S. Army Corps of Engineers.
‡ Adjusted for change in W. Kerr Scott Reservoir.

02112000 YADKIN RIVER AT WILKESBORO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
85/01/31	1210	WATER	0	2.16	450	30	6.40	4.0	3.0	12.4	1100
85/02/25	1125	WATER	0	2.40	574	31	6.90	8.0		12.2	490
85/03/18	1130	WATER	0	2.30	520	28	7.20	8.0		11.6	170
85/04/23	1105	WATER	0	2.26	500	34	7.20	16.0	5.0	9.9	40
85/05/28	1145	WATER	0	2.32	530	28	7.40	18.0		8.4	80
85/06/17	1145	WATER	0	2.19	464	42	7.20	20.0		8.0	100
85/07/15	0950	WATER	0			47	6.70	22.0	10.0	7.3	140
85/08/22	1145	WATER	0.1	3.50	1310	33	7.10	22.0		8.0	270
85/09/23	1130	WATER	0.1	2.00	375	49	7.20	21.0		7.9	60

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/31	1210	WATER	0	13	15	59	.19	.010	.020	.030	.010K
85/02/25	1125	WATER	0	12	6	51					
85/03/18	1130	WATER	0	17	4	59					
85/04/23	1105	WATER	0	14	11	58	.20	.040	.300	.020	.010K
85/05/28	1145	WATER	0	16	23	70					
85/06/17	1145	WATER	0	16	8	58					
85/07/15	0950	WATER	0	17	19	61	.20	.140	.300	.030	.010K
85/08/22	1145	WATER	0.1	13	50	100					
85/09/23	1130	WATER	0.1	16	13	66					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/31	1210	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	1105	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20
85/07/15	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02112120 ROARING RIVER NEAR ROARING RIVER, NC

LOCATION.--Lat 36°14'39", long 81°02'39", Wilkes County, Hydrologic Unit 03040101, on left bank at downstream end of old bridge pier, 800 ft upstream from bridge on Secondary Road 1990, 3.8 mi northwest of village of Roaring River, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--128 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements water years 1925, 1947, 1949-56, 1963. April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.85 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 1964, nonrecording gage on downstream side of bridge at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--21 years, 194 ft³/s, 20.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft³/s Oct. 17, 1975, gage height, 22.54 ft, from floodmark in gage well, from rating curve extended above 2,400 ft³/s on basis of slope-area measurement of peak flow, and at gage heights 14.40 ft, and 10.83 ft; minimum, 37 ft³/s Aug. 26, 29, 1981; minimum daily, 37 ft³/s Aug. 29, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 28 ft, estimated discharge, 45,000 ft³/s and the flood of August 1940 about 24 ft, estimated discharge, 31,000 ft³/s, from information by local residents and rating curve extended as explained above. A discharge of 24 ft³/s was measured Sept. 18, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 15	2400	2,340	5.55	Aug. 18	0230	*2,740	*6.10

Minimum discharge, 52 ft³/s Jan. 21, result of freezeup; minimum daily, 56 ft³/s July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	111	127	106	356	145	128	105	101	85	101	113
2	122	108	122	125	466	142	115	109	97	83	103	108
3	115	102	125	210	288	138	113	118	99	68	83	102
4	113	126	118	313	209	137	112	103	91	65	76	99
5	111	141	131	220	191	137	111	101	91	75	71	100
6	109	115	154	161	190	133	165	99	90	66	71	94
7	109	108	125	146	183	133	126	96	121	68	77	91
8	113	106	121	136	160	134	119	95	121	60	106	105
9	114	105	119	128	164	133	119	93	92	56	87	100
10	110	104	121	124	157	128	116	100	83	96	76	90
11	108	121	121	122	152	130	115	105	82	83	70	86
12	107	110	118	117	583	129	114	115	81	65	68	84
13	106	108	117	119	303	125	113	130	76	140	65	84
14	106	108	115	127	228	125	115	103	73	112	65	81
15	104	109	113	112	198	120	128	290	73	144	61	79
16	106	105	113	118	179	114	151	837	72	123	61	79
17	105	101	114	120	168	115	179	289	74	78	502	79
18	106	101	111	115	159	112	138	184	70	67	1110	79
19	105	115	110	114	156	111	130	148	67	64	240	75
20	103	108	110	103	153	112	123	130	65	61	160	73
21	105	103	115	e70	150	110	117	124	64	59	152	72
22	119	102	113	e120	147	151	114	155	63	66	125	72
23	117	102	108	e130	144	181	110	140	62	75	109	72
24	126	102	107	e130	143	138	123	189	66	65	108	74
25	122	101	107	e130	151	127	164	158	60	80	183	71
26	117	102	104	e125	183	122	121	131	61	137	144	67
27	108	103	106	e125	156	120	122	118	57	148	275	68
28	108	292	106	125	147	120	125	109	57	151	174	65
29	172	182	106	e123	---	117	114	111	59	126	138	65
30	122	139	104	119	---	116	108	103	66	102	148	66
31	115	---	105	127	---	116	---	106	---	99	123	---
TOTAL	3624	3540	3586	4160	5064	3971	3748	4794	2334	2767	4932	2493
MEAN	117	118	116	134	209	128	125	155	77.8	89.3	159	83.1
MAX	221	292	154	313	583	181	179	837	121	151	1110	113
MIN	103	101	104	70	143	110	108	93	57	56	61	65
CFSM	.91	.92	.91	1.05	1.63	1.00	.98	1.21	.61	.70	1.24	.65
IN.	1.05	1.03	1.04	1.21	1.70	1.15	1.09	1.39	.68	.80	1.43	.72

CAL YR 1984 TOTAL 80552 MEAN 220 MAX 2200 MIN 101 CFSM 1.72 IN. 23.41
WTR YR 1985 TOTAL 45813 MEAN 126 MAX 1110 MIN 56 CFSM .98 IN. 13.31

e Estimated

02112120 ROARING RIVER NEAR ROARING RIVER, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/08	1005	WATER	0	1.57	113	26	6.90	16.0	3.0	9.2	240
84/11/06	1020	WATER	0	1.60	118	27	6.50	10.0		10.6	100
84/12/10	1015	WATER	0	1.59	125	23	7.10	3.0		13.0	80
85/01/31	1130	WATER	0	1.59	125	22	6.80	2.0	2.7	13.3	110
85/02/25	1055	WATER	0	1.65	152	25	6.90	12.0		10.6	110
85/03/18	1040	WATER	0	1.50	113	21	7.50	6.0		12.2	20
85/04/23	1025	WATER	0	1.50	113	25	7.40	18.0	4.7	9.6	110
85/05/28	0950	WATER	0	1.52	109	29	7.40	18.0		9.0	340
85/06/17	1110	WATER	0	1.40	73	32	7.60	21.0		8.8	370
85/07/15	1020	WATER	0			32	7.20	22.0	33.0	8.2	880
85/08/22	1010	WATER	0.1	1.55	125	34	7.40	19.0		8.6	1200
85/09/23	1020	WATER	0.1	1.32	72	35	7.40	18.0		9.0	140

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/08	1005	WATER	0	11	5	64	.19	.010	.100	.030	.010K
84/11/06	1020	WATER	0	9	2	57					
84/12/10	1015	WATER	0	11	3	50					
85/01/31	1130	WATER	0	9	2	42	.31	.020	.100	.030	.010K
85/02/25	1055	WATER	0	9	8	53					
85/03/18	1040	WATER	0	12	1	51					
85/04/23	1025	WATER	0	13	12	60	.25	.030	.200	.030	.010K
85/05/28	0950	WATER	0	12	15	53					
85/06/17	1110	WATER	0	14	4	64					
85/07/15	1020	WATER	0	12	43	85	.37	.030	.300	.100	.010
85/08/22	1010	WATER	0.1	12	33	86					
85/09/23	1020	WATER	0.1	14	5	46					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/08	1005	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/31	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	1025	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/28	0950	WATER	0		20K	50K	20K	100K	.2K	100K	20K
85/07/15	1020	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02112250 YADKIN RIVER AT ELKIN, NC

LOCATION.--Lat 36°14'30", long 80°50'49", Yadkin County, Hydrologic Unit 03040101, on right bank at downstream side of bridge on U.S. Highway 21 at Elkin, 0.3 mi downstream from Elkin River, and 362 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--869 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 866.03 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 28, 1964, nonrecording gage on upstream side of bridge at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Considerable regulation by W. Kerr Scott Reservoir (station 02111391). U. S. Army Corps of Engineers gage-height radio telemeter and satellite telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--21 years, 1,434 ft³/s, 22.41 in/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s Apr. 10, 1983, gage height, 24.88 ft, from graph based on hourly gage-height readings and floodmark; minimum, 239 ft³/s Aug. 31, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 36.0 ft, from information by North Carolina State Highway Commission. Flood of August 1940 reached a stage of 37.5 ft. A discharge of 172 ft³/s was measured on Sept. 19, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,400 ft³/s Aug. 18, gage height, 15.24 ft; minimum, 472 ft³/s July 23,24, gage height, 0.98 ft; minimum daily 476 ft³/s July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1310	e800	868	762	1470	972	812	718	794	659	781	1070
2	936	e800	856	889	2330	968	783	702	773	670	757	874
3	e800	e820	873	1140	1480	954	768	735	786	632	676	843
4	e800	e880	853	1710	1190	925	767	715	756	598	640	876
5	e790	e950	875	1380	1310	911	764	678	746	593	612	868
6	e780	e870	1040	1040	1350	899	918	657	748	589	604	821
7	e770	e800	904	957	1160	904	847	648	848	592	616	803
8	e760	e790	878	927	1070	917	798	647	1030	569	997	884
9	e750	e780	866	915	990	925	778	641	758	547	801	792
10	e750	e760	840	907	1050	915	775	652	680	555	693	764
11	e750	e770	857	894	1020	902	768	696	724	625	677	729
12	e750	e790	858	859	3030	898	764	788	782	566	793	681
13	e750	e800	849	827	2340	880	762	794	681	598	681	663
14	e750	e800	849	833	2120	870	762	733	660	706	667	661
15	e750	e805	849	830	1440	864	778	829	660	782	648	649
16	e750	805	847	779	1160	855	910	2920	667	804	651	644
17	e760	805	835	879	1130	853	1070	1530	665	624	2160	629
18	e760	799	821	861	1080	843	891	1180	658	577	7030	626
19	e760	818	816	845	1010	809	842	948	647	557	1590	622
20	e760	820	797	827	995	796	813	871	633	510	1850	621
21	e750	782	800	681	984	791	798	846	623	486	1780	619
22	e740	781	803	774	972	892	783	905	621	482	1730	577
23	e740	781	787	802	971	1100	786	1120	624	484	1500	569
24	e750	781	773	794	969	928	818	1060	632	476	972	569
25	e750	770	770	815	965	872	1020	976	614	531	1750	569
26	e750	761	766	761	1110	841	889	890	601	725	1260	554
27	e750	774	762	731	1170	843	855	861	552	960	1440	551
28	e800	1080	762	787	1000	836	882	824	530	1740	1480	551
29	e950	1140	762	778	---	805	824	810	544	949	1270	547
30	e850	899	762	776	---	805	773	796	711	753	1320	547
31	e810	---	762	796	---	794	---	793	---	762	1250	---
TOTAL	24626	24811	25748	27476	36866	27367	24798	27963	20748	20701	39676	20773
MEAN	794	827	831	886	1317	883	827	902	692	668	1280	692
MAX	1310	1140	1040	1710	3030	1100	1070	2920	1030	1740	7030	1070
MIN	740	760	762	681	965	791	762	641	530	476	604	547
(†)	-1	+9	-27	0	+61	-40	+40	-16	-77	+34	+66	-129
MEAN‡	793	836	804	886	1378	843	867	886	615	702	1346	563
CFSM‡	.91	.96	.93	1.02	1.59	.97	1.00	1.02	.71	.81	1.55	.65
IN.‡	1.05	1.07	1.07	1.18	1.66	1.12	1.12	1.18	.79	.93	1.79	.72

CAL YR 1984 TOTAL 572331 MEAN 1564 MAX 10100 MIN 740 MEAN‡ 1559 CFSM‡ 1.79 IN.‡ 24.42
WTR YR 1985 TOTAL 321553 MEAN 881 MAX 7030 MIN 476 MEAN‡ 874 CFSM‡ 1.01 IN.‡ 13.66

e Estimated
† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir; provided by U. S. Army Corps of Engineers.
‡ Adjusted for change in W. Kerr Scott Reservoir.

02112250 YADKIN RIVER AT ELKIN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/08	1040	WATER	0	1.90	760	39	6.90	17.0	9.5	8.8	160
84/11/06	1100	WATER	0	1.93	870	36	6.70	12.0		9.4	390
84/12/10	1055	WATER	0	1.83	858	38	7.00	5.0		12.1	400
85/01/31	1045	WATER	0	1.70	796	36	6.70	3.0	4.3	12.3	3400
85/02/25	1020	WATER	0	2.04	960	38	7.00	12.0		10.4	230
85/03/18	1010	WATER	0	1.78	834	38	7.50	8.0		10.9	50
85/04/23	0945	WATER	0	1.68	786	42	7.60	18.0	9.0	8.7	130
85/05/28	0910	WATER	0	1.75	819	44	7.50	19.0		8.0	280
85/06/17	1040	WATER	0	1.42	665	45	7.70	22.0		7.8	340
85/07/15	1105	WATER	0	1.46	682	50	7.10	24.0	160.0	7.2	800
85/08/22	0920	WATER	0.1	3.44	1720	46	7.40	21.0		7.7	240
85/09/23	0930	WATER	0.1	1.20	569	56	7.20	19.0		8.1	120

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/08	1040	WATER	0	16	25	92	.28	.010	.200	.070	.010
84/11/06	1100	WATER	0	13	36	100					
84/12/10	1055	WATER	0	14	10	61					
85/01/31	1045	WATER	0	13	12	59	.36	.090	.400	.120	.040
85/02/25	1020	WATER	0	14	23	74					
85/03/18	1010	WATER	0	16	19	100					
85/04/23	0945	WATER	0	14	37	90	.37	.030	.200	.130	.020
85/05/28	0910	WATER	0	14	59	97					
85/06/17	1040	WATER	0	15	33	100					
85/07/15	1105	WATER	0	15	190	250	.60	.080	.500	.340	.040
85/08/22	0920	WATER	0.1	13	25	180					
85/09/23	0930	WATER	0.1	15	18	86					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/08	1040	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/31	1045	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/15	1105	WATER	0	10K	20K	50K	20K	100K	.2K	100K	80

K Less than noted value.

02112360 MITCHELL RIVER NEAR STATE ROAD, NC

LOCATION.--Lat 36°18'42", long 80°48'26", Surry County, Hydrologic Unit 03040101, on right bank 280 ft upstream from bridge on Secondary Road 1001, 1.8 mi upstream from Grass Creek, and 3.3 mi east of State Road.

DRAINAGE AREA.--78.8 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1952-58, 1963. April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 927.12 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 29, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--21 years, 131 ft^3/s, 22.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,470 ft^3/s Sept. 22, 1979, gage height, 16.42 ft; minimum, 24 ft^3/s Aug. 29, 30, 31, Sept. 1, 1981, gage height, 1.56 ft; minimum daily, 24 ft^3/s Aug. 30, 31, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1900, about 18 ft in August 1940, from information by local resident, estimated discharge, 9,000 ft^3/s. A discharge of 16 ft^3/s was measured on Sept. 19, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	2400	1,700	4.97	Aug. 18	0330	*5,480	*11.79

Minimum discharge, 47 ft^3/s June 27, 28, but may have been less during period of ice effect on Jan. 21; minimum daily, 47 ft^3/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	95	102	81	251	103	94	85	84	113	95	e120
2	115	94	94	93	306	102	85	83	81	97	101	e110
3	100	91	94	171	181	98	81	87	82	74	79	e108
4	96	109	94	255	139	96	85	83	77	68	73	e104
5	94	132	102	174	127	100	85	79	79	74	69	e100
6	92	104	125	129	127	98	116	79	76	67	68	e95
7	92	95	104	118	123	96	96	79	97	67	81	e90
8	92	92	99	108	110	93	92	79	95	60	178	e87
9	92	92	97	102	112	104	87	79	81	56	112	e84
10	92	91	95	98	106	103	85	90	75	58	86	e80
11	93	97	94	96	107	99	84	94	72	64	84	80
12	92	92	92	92	323	102	83	109	70	56	73	76
13	93	88	93	91	181	97	83	98	64	55	93	e74
14	92	87	90	92	144	95	83	80	61	56	111	71
15	92	86	88	89	133	92	92	201	61	73	74	71
16	91	86	87	89	121	93	110	573	62	83	69	71
17	88	85	87	92	118	85	112	209	65	62	711	71
18	88	85	85	93	114	85	95	135	61	56	2220	70
19	88	90	85	92	113	82	90	112	62	54	347	e68
20	88	91	85	e80	110	89	89	101	60	54	235	66
21	88	83	85	e50	114	87	85	112	56	70	220	65
22	99	83	87	e70	113	107	85	120	55	109	175	65
23	101	83	84	e80	110	151	85	113	55	84	147	65
24	106	83	83	96	105	116	91	122	57	69	133	66
25	102	83	83	93	111	104	121	113	53	74	267	64
26	98	83	81	e92	138	104	98	99	53	90	178	62
27	96	83	81	e90	118	97	92	91	48	144	261	62
28	97	179	81	89	108	97	92	89	47	224	177	60
29	152	137	81	91	---	96	89	90	100	125	148	59
30	109	108	81	85	---	95	85	85	79	96	137	58
31	99	---	81	96	---	88	---	85	---	90	125	---
TOTAL	3129	2887	2800	3167	3963	3054	2750	3654	2068	2522	6927	2322
MEAN	101	96.2	90.3	102	142	98.5	91.7	118	68.9	81.4	223	77.4
MAX	212	179	125	255	323	151	121	573	100	224	2220	120
MIN	88	83	81	50	105	82	81	79	47	54	68	58
CFSM	1.28	1.22	1.15	1.29	1.80	1.25	1.16	1.50	.87	1.03	2.83	.98
IN.	1.48	1.36	1.32	1.50	1.87	1.44	1.30	1.72	.98	1.19	3.27	1.10

CAL YR 1984	TOTAL	58603	MEAN	160	MAX	1220	MIN	81	CFSM 2.03	IN.	27.67
WTR YR 1985	TOTAL	39243	MEAN	108	MAX	2220	MIN	47	CFSM 1.37	IN.	18.53

e Estimated

02113000 FISHER RIVER NEAR COPELAND, NC

LOCATION.--Lat 36°21'26", long 80°41'10", Surry County, Hydrologic Unit 03040101, on left bank 500 ft upstream from bridge on State Highway 268, 1 mi upstream from Cody Creek, and 2 mi northwest of Copeland.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--October 1931 to current year.

REVISED RECORDS.--WSP 1303: 1933(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 913 ft, by barometer. Prior to Sept. 5, 1936, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Some irrigation diversions at times in the growing season.

AVERAGE DISCHARGE.--54 years, 184 ft³/s, 19.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,200 ft³/s Sept. 22, 1979, gage height, 19.61 ft from rating curve extended above 6,200 ft³/s on basis of slope-area measurement of peak flow at gage height, 18.4 ft; minimum, 12 ft³/s Aug. 30, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 18	0730	*6,580	*11.21	No other peak greater than base discharge.			

Minimum discharge, 48 ft³/s Jan. 21, result of freezeup; minimum daily, 51 ft³/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	109	124	99	404	129	128	92	108	113	177	119
2	130	108	116	114	585	128	112	94	103	114	105	114
3	112	104	118	243	285	124	107	103	107	89	85	110
4	107	124	111	422	199	121	106	92	95	75	77	104
5	103	195	117	272	179	120	104	88	204	79	69	99
6	103	136	177	186	178	115	144	86	124	74	67	94
7	103	118	133	159	173	113	122	83	132	74	83	90
8	105	112	122	145	155	114	112	82	137	63	169	89
9	106	109	119	134	152	116	107	80	105	56	146	85
10	103	108	115	127	155	112	105	90	93	58	91	83
11	102	118	115	125	140	109	105	89	88	73	91	79
12	100	111	111	120	541	112	106	116	88	85	75	75
13	98	105	109	116	276	106	105	96	81	130	66	76
14	98	102	107	119	200	106	105	85	76	80	89	72
15	96	102	107	112	179	105	111	176	75	106	69	71
16	96	103	107	115	162	103	129	857	76	141	70	69
17	97	102	106	123	157	104	147	318	81	77	710	68
18	100	101	105	116	148	101	116	198	73	63	3950	66
19	98	107	105	114	144	99	110	146	70	59	464	65
20	97	106	105	110	143	100	105	126	66	56	261	63
21	98	100	109	72	139	100	102	127	63	70	385	62
22	101	100	112	135	135	126	99	135	61	156	198	62
23	109	100	105	132	135	223	96	294	66	89	152	61
24	112	101	103	129	135	151	98	263	76	64	144	62
25	107	101	102	127	135	129	169	205	65	125	315	61
26	104	99	99	117	168	119	113	160	59	118	211	56
27	103	98	99	128	146	117	109	138	53	176	337	57
28	104	197	100	125	134	114	115	125	51	140	210	54
29	188	204	100	123	---	113	102	124	60	133	164	54
30	127	136	99	117	---	112	95	113	76	109	145	54
31	117	---	98	132	---	111	---	113	---	95	129	---
TOTAL	3503	3516	3455	4408	5682	3652	3384	4894	2612	2940	9304	2274
MEAN	113	117	111	142	203	118	113	158	87.1	94.8	300	75.8
MAX	279	204	177	422	585	223	169	857	204	176	3950	119
MIN	96	98	98	72	134	99	95	80	51	56	66	54
CFSM	.88	.91	.87	1.11	1.59	.92	.88	1.23	.68	.74	2.34	.59
IN.	1.02	1.02	1.00	1.28	1.65	1.06	.98	1.42	.76	.85	2.70	.66

CAL YR 1984 TOTAL 77098 MEAN 211 MAX 2080 MIN 83 CFSM 1.65 IN. 22.41
WTR YR 1985 TOTAL 49624 MEAN 136 MAX 3950 MIN 51 CFSM 1.06 IN. 14.42

02113500 YADKIN RIVER AT SILOAM, NC

LOCATION.--Lat 35°16'55", long 80°33'46", Yadkin County, Hydrologic Unit 03040101, on right bank at upstream side of bridge on Secondary Road 1003, at Siloam, 70 ft upstream from Hagan Creek, and 339 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--1,226 mi^2.

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 782.02 ft above National Geodetic Vertical Datum of 1929 (North Carolina Department of Transportation bench mark). Prior to February 22, 1977, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by W. Kerr Scott Reservoir (station 02111391).

AVERAGE DISCHARGE.--9 years, 2,015 ft^3/s, 22.32 in/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,600 ft^3/s Sept. 22, 1979, gage height, 26.72 ft; minimum, 304 ft^3/s Aug. 31, Sept. 1, 1981, gage height, 2.66 ft; minimum daily, 315 ft^3/s Sept. 1, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 14 or 15, 1940 reached a stage of 816.7 ft above National Geodetic Vertical Datum of 1929, 34.7 ft above gage datum, from information by U. S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,100 ft^3/s Aug. 18, gage height, 21.22 ft; minimum, 674 ft^3/s July 21, gage height, 3.24 ft; minimum daily, 703 ft^3/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1800	1190	1190	1040	e2200	1320	1130	1010	1150	1030	1300	e1800
2	1380	1150	1160	1090	e3500	1300	1110	986	1100	1090	1190	e1600
3	1210	1090	1180	1550	e2700	1290	1080	1030	1110	993	988	e1300
4	1180	1150	1150	2900	e1900	1260	1080	1010	1070	891	901	e1200
5	1160	1480	1170	2430	e1750	1240	1070	960	1200	894	853	e1300
6	1160	1260	1480	1610	e1800	1220	1210	924	1220	865	831	e1200
7	1140	1170	1150	1410	e1700	1210	1270	907	1690	871	866	e1200
8	1120	1120	1170	1320	e1500	1220	1130	896	1720	856	1390	e1200
9	1120	1100	1190	1290	e1400	1230	1090	894	1210	821	1400	e1100
10	1120	1120	1160	1260	e1300	1230	1070	916	1050	789	1020	e1100
11	1120	1180	1160	1240	e1400	1210	1070	952	1070	901	961	e1050
12	1100	1170	1180	1210	e4700	1210	1070	1080	1180	838	1030	e1000
13	1090	1120	1140	1170	e4000	1180	1070	1100	1020	935	944	e950
14	1080	1100	1150	1160	e3200	1160	1070	1020	972	944	976	933
15	1100	1100	1160	1160	e2200	1160	1080	1010	952	992	910	916
16	e1100	1100	1130	1100	e1700	1140	1210	4870	963	1260	884	911
17	e1100	1090	1130	1200	e1500	1140	1430	2620	954	927	1860	898
18	e1100	1080	1110	1190	e1450	1120	1250	1780	921	820	19100	884
19	e1100	1110	1100	1160	e1400	1090	1160	1420	878	789	3620	880
20	e1100	1140	1090	e1100	e1400	1070	1120	1250	854	763	2910	872
21	e1100	1070	1100	e960	e1390	1080	1090	1370	843	703	3100	867
22	e1300	1060	1110	e1000	e1390	1160	1070	1740	849	837	2590	838
23	e1200	1060	1080	e1080	e1380	1650	1060	2200	862	784	2120	815
24	e1200	1060	1050	e1100	e1370	1360	1080	1710	903	713	1600	808
25	e1200	1060	1060	e1110	e1360	1230	1410	1600	858	825	1800	806
26	e1200	1050	1050	e1080	e1400	1170	1240	1360	816	1090	e2500	792
27	e1150	1050	1040	e1010	e1500	1160	1150	1270	781	1490	e2000	786
28	e1100	1250	1040	e1080	1420	1150	1190	1220	729	2220	e2100	772
29	e1300	1780	1040	e1090	---	1130	1150	1270	808	1510	e2200	766
30	e1400	1270	1040	e1090	---	1130	1060	1180	1120	1170	e1900	766
31	1200	---	1030	e1100	---	1110	---	1170	---	1090	e2000	---
TOTAL	36730	34730	34990	39290	53910	37330	34270	42725	30853	30701	67844	30310
MEAN	1185	1158	1129	1267	1925	1204	1142	1378	1028	990	2189	1010
MAX	1800	1780	1480	2900	4700	1650	1430	4870	1720	2220	19100	1800
MIN	1080	1050	1030	960	1300	1070	1060	894	729	703	831	766
(†)	-1	+9	-27	0	+61	-40	+40	-16	-77	+34	+66	-129

CAL YR 1984	TOTAL	801310	MEAN	2189	MAX	14000	MIN	1030	MEAN‡	2184	CFSM‡	1.78	IN.‡	24.26
WTR YR 1985	TOTAL	473683	MEAN	1298	MAX	19100	MIN	703	MEAN‡	1291	CFSM‡	1.05	IN.‡	14.30

e Estimated

† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir; provided by U. S. Army Corps of Engineers.

‡ Adjusted for change in W. Kerr Scott Reservoir.

PEE DEE RIVER BASIN

02113850 ARARAT RIVER AT ARARAT, NC

LOCATION.--Lat 36°24'16", long 80°33'43", Surry County, Hydrologic Unit 03040101, on right bank 265 ft upstream from bridge on Secondary Road 2019 at Ararat, and 300 ft downstream from Flat Shoal Creek.

DRAINAGE AREA.--231 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 880.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--21 years, 312 ft^3/s, 18.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft^3/s Sept. 22, 1979, gage height, 24.46 ft; minimum, 19 ft^3/s Aug. 29, 30, 1981; minimum daily, 21 ft^3/s Aug. 29, 30, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 14, 1947 reached a stage of 21.4 ft, result of failure of dams upstream, discharge 26,000 ft^3/s, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 23	0600	3,440	6.20	Aug. 18	0900	*10,100	*13.87

Minimum discharge, 70 ft^3/s Jan. 21, result of freezeup; minimum daily, 101 ft^3/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	446	168	181	152	610	198	199	153	202	202	308	253
2	215	168	174	177	943	198	175	159	191	233	229	240
3	185	162	180	378	434	192	168	186	196	206	178	226
4	175	232	168	578	298	187	165	157	186	151	157	211
5	168	343	185	383	276	188	162	142	283	141	146	206
6	167	216	270	265	272	181	225	143	322	136	143	200
7	164	187	198	232	256	175	182	137	239	142	173	189
8	170	175	186	212	218	174	166	133	230	125	503	194
9	176	173	177	196	201	180	159	130	192	113	353	185
10	174	169	176	187	220	179	157	141	174	115	212	181
11	174	184	175	182	205	171	155	140	167	132	173	173
12	170	174	171	177	640	176	155	174	172	166	149	168
13	167	166	168	169	372	171	151	150	157	254	140	172
14	164	161	165	171	276	169	152	133	147	163	140	167
15	165	161	165	166	251	166	154	228	144	173	128	166
16	166	163	163	162	227	163	254	1230	171	178	173	165
17	168	159	160	181	232	165	272	503	215	135	1110	164
18	172	158	160	170	216	161	195	257	172	115	6090	164
19	169	173	161	171	213	159	180	204	153	107	945	164
20	163	168	163	161	210	159	171	185	140	103	532	164
21	152	159	171	102	199	159	165	193	133	101	612	164
22	158	159	178	e156	198	175	158	288	128	137	386	164
23	173	160	163	e160	200	371	153	1150	126	159	323	164
24	192	161	159	e160	197	246	181	815	142	112	310	162
25	172	158	158	e160	199	208	393	434	130	261	581	160
26	169	157	155	e160	265	189	208	315	155	295	429	154
27	166	156	154	e160	228	184	184	262	117	651	659	151
28	176	263	156	155	203	179	184	238	110	567	425	145
29	295	281	155	161	---	176	171	228	113	329	342	139
30	192	200	155	157	---	174	159	206	165	244	305	136
31	173	---	154	185	---	171	---	209	---	222	274	---
TOTAL	5736	5514	5304	6186	8259	5744	5553	9023	5172	6168	16628	5291
MEAN	185	184	171	200	295	185	185	291	172	199	536	176
MAX	446	343	270	578	943	371	393	1230	322	651	6090	253
MIN	152	156	154	102	197	159	151	130	110	101	128	136
CFSM	.80	.80	.74	.87	1.28	.80	.80	1.26	.74	.86	2.32	.76
IN.	.92	.89	.85	.00	1.33	.93	.89	1.45	.83	.99	2.68	.85

CAL YR 1984 TOTAL 117769 MEAN 322 MAX 2430 MIN 131 CFSM 1.39 IN. 18.97
WTR YR 1985 TOTAL 84578 MEAN 232 MAX 6090 MIN 101 CFSM 1.00 IN. 13.62

e Estimated

02113850 ARARAT RIVER AT ARARAT, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/08	1240	WATER	0	1.14	172	71	7.20	17.0	5.0	9.0	150
84/11/06	1310	WATER	0	1.24	211	83	7.00	11.0		10.1	1500
84/12/10	1300	WATER	0	1.17	172	70	7.20	4.0		13.2	160
85/01/31	0950	WATER	0	1.16	168	101	6.80	2.0	3.8	13.0	110
85/02/25	0930	WATER	0	1.21	193	88	7.00	13.0		10.0	20
85/03/18	0915	WATER	0	1.12	156	75	7.30	7.0		11.8	20
85/04/23	0850	WATER	0	1.09	148	125	7.00	18.0	16.0	8.4	30
85/05/28	0830	WATER	0	1.27	230	78	6.90	19.0		8.4	420
85/06/17	0955	WATER	0	1.20	180	81	7.60	21.0		7.8	7900
85/07/15	1150	WATER	0	1.05	144	91	7.40	25.0	45.0	7.8	240
85/08/22	0855	WATER	0.1	1.54	389	88	7.20	20.0		8.0	1200
85/09/23	0855	WATER	0.1	1.12	164	104	7.20	18.0		8.4	290

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/08	1240	WATER	0	19	10	95	.32	.040	.200	.200	.140
84/11/06	1310	WATER	0	21	20	110					
84/12/10	1300	WATER	0	19	4	60					
85/01/31	0950	WATER	0	19	3	93	.49	.220	.500	.310	.230
85/02/25	0930	WATER	0	19	13	91					
85/03/18	0915	WATER	0	18	4	81					
85/04/23	0850	WATER	0	22	37	140	.50	.150	.400	.310	.170
85/05/28	0830	WATER	0	17	55	120					
85/06/17	0955	WATER	0	20	150	280					
85/07/15	1150	WATER	0	21	58	140	.46	.040	.400	.240	.100
85/08/22	0855	WATER	0.1	19	41	130					
85/09/23	0855	WATER	0.1	11	4	86					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/08	1240	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/31	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/23	0850	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/15	1150	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02114450 LITTLE YADKIN RIVER AT DALTON, NC

LOCATION.--Lat 36°17'56", long 80°25'53", Stokes County, Hydrologic Unit 03040101, on left bank 1,200 ft downstream from bridge on U.S. Highway 52, 1.0 mi southwest of Dalton, 1.3 mi downstream from Southern Railway bridge, and 2.0 mi downstream from Danbury Creek.

DRAINAGE AREA.--42.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 813.7 ft above National Geodetic Vertical Datum of 1929 (North Carolina State Highway Commission bench mark).

REMARKS.--No estimated daily discharges. Records good. A Soil Conservation Service flood-control dam on upstream tributary, drainage area 4.7 mi^2 with flood storage of 695 acre-ft was completed on June 21, 1977.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--25 years, 46.2 ft^3/s, 14.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,400 ft^3/s Sept. 22, 1979, gage height 20.29 ft, from rating curve extended above 2,700 ft^3/s on basis of slope-area measurement at gage height 17.86 ft; minimum, 1.3 ft^3/s Aug. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 18	0200	*4,100	*11.13	No other peak greater than base discharge.			

Minimum discharge, 6.2 ft^3/s June 28, July 21, gage height, 0.51 ft; minimum daily, 6.7 ft^3/s July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	19	23	18	226	29	22	15	14	16	76	20
2	21	19	22	20	266	26	20	17	13	14	41	18
3	18	18	24	60	97	25	19	20	13	12	24	18
4	17	23	22	114	54	27	19	16	12	10	20	17
5	16	34	28	67	46	25	19	15	39	10	18	16
6	16	24	49	40	49	23	21	14	57	10	16	16
7	16	21	31	33	50	22	19	14	45	11	17	17
8	17	20	27	28	38	22	18	14	32	8.9	44	15
9	17	19	24	25	42	23	18	13	19	7.8	30	14
10	16	19	22	24	32	22	18	14	16	8.2	19	14
11	16	21	21	23	31	21	18	17	17	8.9	25	14
12	16	19	21	22	218	21	18	16	22	8.4	18	13
13	16	18	21	23	79	20	18	14	14	10	15	13
14	15	18	20	22	49	21	18	13	12	33	14	12
15	15	18	20	20	39	20	21	19	12	12	13	12
16	15	19	20	25	34	20	46	96	14	12	12	12
17	16	18	20	23	32	20	38	35	16	9.2	357	12
18	17	18	20	22	29	19	25	26	13	7.9	1070	12
19	17	26	20	22	28	19	22	18	12	7.2	111	11
20	16	22	20	20	27	19	20	16	10	6.7	53	11
21	17	19	20	20	26	19	18	19	9.9	7.0	115	11
22	47	19	21	21	26	25	18	28	9.9	9.0	42	11
23	26	18	19	22	26	33	17	30	9.6	8.4	30	11
24	21	19	19	23	27	26	18	20	9.9	7.3	26	11
25	22	18	19	23	28	23	22	19	9.3	97	32	10
26	19	18	18	21	37	21	18	16	9.1	136	74	9.9
27	18	18	18	21	30	21	17	15	7.9	102	118	9.9
28	18	59	18	23	32	21	18	14	7.2	235	42	9.9
29	41	37	18	24	---	21	16	14	8.3	73	29	9.9
30	24	26	18	23	---	21	15	14	10	37	25	9.9
31	21	---	18	32	---	21	---	14	---	64	22	---
TOTAL	634	664	681	904	1698	696	614	625	493.1	998.9	2548	390.5
MEAN	20.5	22.1	22.0	29.2	60.6	22.5	20.5	20.2	16.4	32.2	82.2	13.0
MAX	47	59	49	114	266	33	46	96	57	235	1070	20
MIN	15	18	18	18	26	19	15	13	7.2	6.7	12	9.9
CFSM	.48	.52	.51	.68	1.42	.53	.48	.47	.38	.75	1.92	.30
IN.	.55	.58	.59	.79	1.48	.60	.53	.54	.43	.87	2.21	.34

CAL YR 1984 TOTAL 19932 MEAN 54.5 MAX 1510 MIN 13 CFSM 1.27 IN. 17.32
WTR YR 1985 TOTAL 10946.5 MEAN 30.0 MAX 1070 MIN 6.7 CFSM .70 IN. 9.51

PEE DEE RIVER BASIN

02114450 LITTLE YADKIN RIVER AT DALTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/31	0910	WATER	0	.82	31	43	6.60	1.0	9.5	13.4	70
85/02/25	0850	WATER	0	.80	28	52	6.60	13.0		9.8	140
85/03/18	0835	WATER	0	.72	20	44	6.90	7.0		11.7	140
85/04/22	1255	WATER	0	.69	18	57	7.70	21.0	17.0	9.8	270
85/05/20	1300	WATER	0	.68	17	55	7.60	20.0		9.4	10
85/06/17	0920	WATER	0	.67	16	71	7.20	20.0		7.7	720
85/07/15	1355	WATER	0	.60	11	54	7.60	25.0	190.0	7.7	1100
85/08/22	0820	WATER	0.1	.92	44	56	7.10	19.0		8.0	300
85/09/23	0815	WATER	0.1	.60	11	59	7.00	17.0		8.0	140

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/31	0910	WATER	0	17	4	61	.43	.010	.200	.030	.010K
85/02/25	0850	WATER	0	17	9	89					
85/03/18	0835	WATER	0	17	2	68					
85/04/22	1255	WATER	0	21	14	79	.26	.050	.200	.060	.010
85/05/20	1300	WATER	0	20	38	110					
85/06/17	0920	WATER	0	23	77	170					
85/07/15	1355	WATER	0	21	100	230	.45	.050	.300	.220	.020
85/08/22	0820	WATER	0.1	14	30	120					
85/09/23	0815	WATER	0.1	22	5	50					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/31	0910	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/22	1255	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/15	1355	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30

K Less than noted value.

PEE DEE RIVER BASIN

02115360 YADKIN RIVER AT ENON, NC

LOCATION.--Lat 36°07'55", long 80°26'39", Forsyth County, Hydrologic Unit 03040101, on left bank 50 ft upstream from bridge on Secondary Road 1525, 1.5 mi east of Enon, 4 mi upstream from Forbush Creek, and 324 mi up stream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--1,694 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1964 to current year.

REVISED RECORDS.--WDR NC-72-1: 1970 (M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 701.71 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 6, 1968, nonrecording gage on downstream side of bridge at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by W. Kerr Scott Reservoir (station 02111391). U. S. Army Corps of Engineers gage height radio telemeter and satellite telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--21 years, 2,564 ft³/s, 20.55 in/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,300 ft³/s June 21, 1972; maximum gage height, 29.52 ft Sept. 22, 1979; minimum, 363 ft³/s Aug. 31, Sept. 1, 1981, gage height, 2.05 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 15, 1940 reached a stage of 737.5 ft above National Geodetic Vertical Datum of 1929 (35.8 ft above gage datum), from information by U. S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,700 ft³/s Aug. 18, gage height, 24.09 ft; minimum, 706 ft³/s July 22, gage height, 2.64 ft; minimum daily 736 ft³/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2560	1460	1520	1250	3030	1710	1410	1200	1360	1190	1960	e2000
2	1990	1430	1450	1290	6610	1680	1410	1150	1300	1370	1620	e1900
3	1540	1350	1460	1830	4300	1650	1330	1230	1310	1280	1310	e1750
4	1470	1370	1450	3870	2560	1610	1310	1220	1270	1070	1130	e1500
5	1430	2010	1430	3670	2270	1590	1290	1120	1360	1030	1040	e1450
6	1420	1750	2010	2290	2450	1550	1390	1060	1800	991	994	e1410
7	1420	1510	1750	1880	2340	1510	1620	1030	1930	970	996	e1390
8	1400	1410	1530	1720	2010	1520	1380	1010	2390	950	1610	e1400
9	1400	1360	1480	1630	1780	1550	1320	996	1560	859	2300	e1420
10	1400	1350	1450	1580	1800	1550	1290	1010	1250	829	1410	e1300
11	1370	1410	1430	1540	1760	1500	1280	1100	1320	917	1210	e1300
12	1360	1470	1430	1500	4950	1510	1280	1180	1730	919	1230	e1250
13	1350	1360	1430	1410	4820	1470	1270	1280	1220	1120	1170	e1200
14	1340	1340	1410	1390	3500	1450	1260	1200	1080	1070	1090	e1160
15	1330	1340	1390	1400	2890	1430	1270	1130	1040	1140	1080	e1120
16	1310	1330	1390	1320	2160	1410	1480	5680	1060	1440	989	e1100
17	1310	1330	1380	1390	1980	1400	1810	3880	1160	1150	1640	1070
18	1340	1310	1360	1480	1900	1380	1640	2490	1080	913	26800	1050
19	1350	1350	1350	1430	1810	1340	1420	1850	1020	833	e6000	1040
20	1350	1420	1350	1400	1740	1300	1350	1530	973	798	e3200	1030
21	1350	1330	1350	1150	1710	1310	1290	1540	946	736	e3300	1010
22	1560	1290	1370	1010	1680	1370	1260	2190	931	e835	e2800	999
23	1530	1280	1360	e1250	1660	2130	1230	3840	915	900	e2400	957
24	1440	1280	1290	e1250	1660	1910	1250	2710	949	807	e2300	951
25	1510	1270	1280	e1250	1680	1610	1760	2390	953	e938	e1900	945
26	1440	1260	1270	1320	1920	1480	1650	1860	912	1950	e3000	930
27	1430	1250	1250	1240	2080	1450	1400	1630	912	2270	e2500	912
28	1380	1480	1250	1260	1890	1440	1400	1510	853	3120	e2600	898
29	1630	2500	1250	1320	---	1410	1400	1480	821	2440	e2700	875
30	1710	1740	1250	1280	---	1390	1260	1400	1210	1730	e2400	878
31	1490	---	1250	1330	---	1370	---	1350	---	1360	e2300	---
TOTAL	45910	43340	43620	48930	70940	46980	41710	54246	36615	37925	86979	36195
MEAN	1481	1445	1407	1578	2534	1515	1390	1750	1221	1223	2806	1207
MAX	2560	2500	2010	3870	6610	2130	1810	5680	2390	3120	26800	2000
MIN	1310	1250	1250	1010	1660	1300	1230	996	821	736	989	875
(†)	-1	+9	-27	0	+61	-40	+40	-16	-77	+34	+66	-129

CAL YR 1984 TOTAL 1053430 MEAN 2878 MAX 27200 MIN 1210 MEAN‡ 2873 CFSM‡ 1.70 IN.‡ 23.09
WTR YR 1985 TOTAL 593390 MEAN 1626 MAX 26800 MIN 736 MEAN‡ 1616 CFSM‡ 0.95 IN.‡ 12.95

e Estimated
† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir; provided by U. S. Army Corps of Engineers.
‡ Adjusted for change in W. Kerr Scott Reservoir.

02115360 YADKIN RIVER AT ENON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/08	0830	WATER	0	3.70	1400	57	7.00	17.0	9.3	8.7	30
84/11/06	0835	WATER	0	4.23	1800	58	6.90	12.0		9.7	530
84/12/10	0835	WATER	0	3.78	1460	43	7.20	3.0		12.8	30
85/01/21	0905	WATER	0	3.43	1210	46	7.00	.0	3.1	13.5	20
85/02/13	0910	WATER	0	7.48	4700	45	6.50	3.0		11.9	2800
85/03/14	0840	WATER	0	3.75	1440	50	6.90	11.0		10.6	200
85/04/02	0850	WATER	0	3.77	1450	50	6.80	12.0	2.8	9.4	20
85/05/02	0830	WATER	0	3.33	1140	56	7.10	19.0		8.2	40
85/06/14	0850	WATER	0	3.54	1290	51	7.10	24.0		7.4	50
85/07/09	0800	WATER	0	2.90	862	59	6.80	25.0	17.0	7.2	30
85/08/15	0820	WATER	0.1	3.23	1080	60	6.90	25.0		7.2	60
85/09/04	0830	WATER	0.1		1460	58	7.30	24.0		7.7	140

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/08	0830	WATER	0	17	19	84	.34	.020	.200	.110	.040
84/11/06	0835	WATER	0	17	42	110					
84/12/10	0835	WATER	0	18	3	57					
85/01/21	0905	WATER	0	18	5	54	.43	.080	.300	.080	.050
85/02/13	0910	WATER	0	11	280	400					
85/03/14	0840	WATER	0	15	22	61					
85/04/02	0850	WATER	0	17	17	320	.40	.020	.200	.090	.020
85/05/02	0830	WATER	0	16	39	84					
85/06/14	0850	WATER	0	16	63	150					
85/07/09	0800	WATER	0	15	37	110	.53	.010	.300	.140	.060
85/08/15	0820	WATER	0.1	17	69	130					
85/09/04	0830	WATER	0.1	16	38	100					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/08	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/21	0905	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/02	0850	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/09	0800	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20

K Less than noted value.

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC
(National stream-quality accounting network station)

LOCATION (REVISED).--Lat 35°51'23", long 80°23'14", Davie County, Hydrologic Unit 03040101, on right bank on downstream side of new bridge on U.S. Highway 64, 1.5 mi south of Yadkin College, 6.2 mi downstream from Reedy Creek, and 295 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--2,280 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORDS.--WSP 822: Drainage area. WSP 852: 1935-37(m).

GAGE.--Water-stage recorder. Datum of gage is 638.45 ft (corrected) above National Geodetic Vertical Datum of 1929. Prior to July 26, 1957 at site on left bank 100 ft downstream at same datum. July 27, 1957 to Sept. 19, 1984 at site 20 ft downstream on bridge pier near left bank, at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation and occasionally some regulation during low flow caused by small hydroelectric plant with little storage capacity 10 mi upstream. Since August 1962, some regulation by W. Kerr Scott Reservoir (station 02111391). U. S. Army Corps of Engineers satellite telemeter, and Yadkin, Inc. gage-height telephone telemeter, at station.

AVERAGE DISCHARGE.--57 years, 2,982 ft^3/s, 17.76 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,200 ft^3/s Aug. 15, 1940, gage height, 33.75 ft; minimum observed, 177 ft^3/s Oct. 12, 1954, gage height, -0.42 ft; minimum daily, 330 ft^3/s Oct. 9, 1954, Sept. 23, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916, reached a stage of 36.3 ft, from floodmarks, discharge, 94,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,800 ft^3/s Aug. 19, gage height, 18.67 ft; minimum, 659 ft^3/s Sept. 24, gage height, 0.47 ft; minimum daily, 926 ft^3/s July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2140	e2140	e1960	e1550	e5460	e2100	e1680	1510	1590	1500	1840	2250
2	e3190	e1980	e1830	e1610	e10300	e2080	1730	1420	1550	1510	2150	1980
3	e1850	e1750	e1800	e2820	e7700	e2030	1670	1500	1530	1550	1700	1780
4	e1750	e1800	e1800	e3930	e3690	e2030	1630	1540	1510	1390	1390	1610
5	e1700	e2080	e1800	e5490	e3100	e1930	1610	1480	1460	1250	1280	1620
6	e1650	e2000	e2240	e3390	e3330	e1880	1610	1310	2160	1210	1170	1600
7	e1650	e2330	e2450	e2550	e2900	e1880	1820	1270	2420	1170	1170	1580
8	e1650	e2000	e1940	e2290	e2730	e1830	1770	1280	3470	1130	1370	1510
9	e1620	e1800	e1850	e2120	e2450	e1880	1650	1270	2370	1050	2510	1560
10	e1600	e1800	e1800	e2000	e2200	e1880	1610	1280	1700	985	1990	1490
11	e1600	e1850	e1750	e1960	e2260	e1830	1590	1350	1460	995	1460	1330
12	e1600	e1900	e1750	e1870	e4970	e1830	1590	1390	3000	1110	1370	1360
13	e1600	e1800	e1750	e1820	e7800	e1780	1580	1500	2040	1120	1340	e1320
14	e1600	e1750	e1730	e1770	e4460	e1780	1570	1480	1500	1720	1260	e1290
15	e1600	e1700	e1710	e1790	e3670	e1780	1570	1370	1360	1340	1190	e1250
16	e1600	e1680	e1710	e1780	e3000	e1720	1800	4540	1330	1750	1140	1210
17	e1600	e1710	e1710	e1690	e2400	e1680	2090	6070	1440	1680	1340	1190
18	e1620	e1710	e1650	e1950	e2380	e1680	2130	3370	1410	1180	12300	1210
19	e1650	e1760	e1630	e1860	e2290	e1680	1810	2410	1290	1020	20600	1170
20	e1700	e1850	e1620	e1780	e2240	e1630	1670	1900	1230	989	4750	1150
21	e1700	e1780	e1600	e1550	e2100	e1630	1600	1710	1100	931	4970	1130
22	e1730	e1700	e1600	e1250	e2080	e1780	1540	2100	1120	926	4280	1110
23	e2080	e1630	e1600	e1410	e2030	e2400	1420	5600	1100	1300	3210	1090
24	e1930	e1670	e1600	e1600	e2080	e2400	1480	4030	1090	1080	2770	999
25	e1860	e1650	e1580	e1600	e2080	e2080	1740	3110	1150	1240	2450	1060
26	e1860	e1630	e1560	e1600	e2500	e1880	2140	2440	1150	2740	3660	1040
27	e1780	e1600	e1550	e1610	e2750	e1780	1720	2060	1090	2420	3170	1010
28	e1760	e1600	e1550	e1620	e2400	e1780	1630	1720	1010	2980	3590	990
29	e1760	e2340	e1540	e1720	---	e1730	1650	1760	959	3470	2880	978
30	e2240	e3000	e1540	e1780	---	e1680	1630	1700	1180	2220	2440	939
31	e2400	---	e1520	e1870	---	e1630	---	1630	---	1730	2420	---
TOTAL	56070	56790	53720	63630	97350	57680	50730	67100	46769	46686	99160	39806
MEAN	1809	1893	1733	2053	3477	1861	1691	2165	1559	1506	3199	1327
MAX	3190	3000	2450	5490	10300	2400	2140	6070	3470	3470	20600	2250
MIN	1600	1600	1520	1250	2030	1630	1420	1270	959	926	1140	939
(†)	-1	+9	-27	0	+61	-40	+40	-16	-77	+34	+66	-129

CAL YR 1984 TOTAL 1339470 MEAN 3660 MAX 30100 MIN 1440 MEAN‡ 3655 CFSM‡ 1.60 IN.‡ 21.82
WTR YR 1985 TOTAL 735491 MEAN 2015 MAX 20600 MIN 926 MEAN‡ 2008 CFSM‡ 0.88 IN.‡ 11.96

e Estimated on basis of once-daily gage readings.
† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir; provided by U. S. Army Corps of Engineers.
‡ Adjusted for change in W. Kerr Scott Reservoir.

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1944, 1951 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1967, October 1970 to September 1978, February 1979 to current year.
WATER TEMPERATURE: October 1943 to September 1944, October 1950 to September 1951, October 1955 to September 1967, October 1970 to current year.
SUSPENDED-SEDIMENT DISCHARGE: January 1951 to current year.

INSTRUMENTATION.--Water-quality monitor from October 1970 to September 1975.

REMARKS.--Station operated as part of NASQAN network from March 1979 to present. Miscellaneous chemical data published for water years 1947-49, 1955. Daily records of specific conductance for water years 1956-64 are available in files of district office in Raleigh, NC.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 815 microsiemens Aug. 26, 1971; minimum recorded, 20 microsiemens Nov. 2, 16, 28, Dec. 1, 6, 7, 1971.
WATER TEMPERATURE: Maximum daily, 32.0°C Aug. 21, 1983; minimum daily, 0.0°C on many days during most winter months.
SEDIMENT CONCENTRATION: Maximum daily mean, 2,970 mg/L May 26, 1952; minimum daily mean, 1 mg/L Dec. 3, 1953.
SEDIMENT LOAD: Maximum daily, 182,000 tons June 22, 1972; minimum daily, 3 tons Dec. 3, 1953.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 170 microsiemens June 12; minimum daily, 50 microsiemens Aug. 19.
WATER TEMPERATURE: Maximum daily, 27.0°C June 1; minimum daily, 2.0°C Feb. 8, 11, 14.
SEDIMENT CONCENTRATION: Maximum daily mean, 1,910 mg/L Aug. 18; minimum daily mean, 7 mg/L Nov. 25, 26, 27, Jan 21.
SEDIMENT LOAD: Maximum daily, 71,500 tons Aug. 18; minimum daily, 27 tons Jan. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV												
20...	1000	1850	80	7.3	7.5	8.1	748	11.6	99	360	370	18
FEB												
11...	1000	2300	80	6.7	2.0	5.0	744	13.7	101	--	--	18
APR												
01...	1130	1680	95	6.9	15.0	11	742	9.6	98	420	820	19
MAY												
15...	1000	1340	97	7.0	21.0	.10	748	8.3	95	K68	K48	18
16...	1045	3830	85	6.2	21.0	--	--	6.5	--	--	--	--
JUL												
24...	1000	1110	115	7.2	21.0	40	746	8.4	96	--	--	18
AUG												
19...	1200	24800	--	7.0	21.5	75	747	8.5	98	--	--	11

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV												
20...	0	4.8	1.5	7.0	42	.7	2.0	5.1	6.4	.10	13	56
FEB												
11...	0	4.5	1.6	7.2	43	.8	2.3	5.3	6.2	<.10	13	56
APR												
01...	0	5.0	1.6	9.0	47	.9	2.2	6.3	8.7	.10	9.7	54
MAY												
15...	0	4.6	1.5	9.5	50	1	2.3	5.9	8.0	.10	13	63
16...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
24...	0	4.7	1.6	12	54	1	3.3	5.9	12	.20	12	66
AUG												
19...	5	2.8	1.0	1.7	19	.2	3.4	6.1	2.5	<.10	5.8	36

K Results based on colony count outside the acceptable range (non-ideal colony count).

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
NOV 20...	54	.08	280	.72	.170	.22	.90	.230	.070	.140	.43
FEB 11...	53	.08	348	.83	.060	.08	.70	.180	.100	.120	.37
APR 01...	56	.07	245	.72	.040	.05	.60	.270	.170	.170	.52
MAY 15...	59	.09	228	.72	.070	.09	.50	.290	.250	.220	.67
16...	--	--	--	--	--	--	--	--	--	--	--
JUL 24...	67	.09	198	.89	.070	.09	.70	.250	.210	.210	.64
AUG 19...	27	.05	2410	.48	.120	.15	2.2	.170	<.010	<.010	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
NOV 20...	20	<1	14	<.5	<1	2	<3	2	120	1	<4
FEB 11...	60	<1	17	<.5	<1	<1	<3	1	120	1	4
APR 01...	--	--	--	--	--	--	--	--	--	--	--
MAY 15...	20	<1	18	<.5	<1	<1	<3	2	160	<1	<4
16...	--	--	--	--	--	--	--	--	--	--	--
JUL 24...	--	--	--	--	--	--	--	--	--	--	--
AUG 19...	80	<1	23	<.5	<1	<1	<3	6	200	<1	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 20...	17	<.1	<10	1	<1	<1	41	<6	4	22	110	74
FEB 11...	15	<.1	<10	1	<1	<1	38	<6	5	30	186	49
APR 01...	--	--	--	--	--	--	--	--	--	36	163	76
MAY 15...	12	.2	<10	1	<1	<1	41	<6	6	25	90	90
16...	--	--	--	--	--	--	--	--	--	758	7840	92
JUL 24...	--	--	--	--	--	--	--	--	--	102	306	98
AUG 19...	30	<.1	<10	2	<1	<1	22	<6	6	536	35900	66

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	87	76	68	120	84	101	92	92	92	84	81
2	63	89	70	65	77	86	97	92	89	91	82	83
3	66	100	76	65	75	86	96	104	84	85	89	82
4	79	104	74	68	75	86	90	93	81	82	89	90
5	85	100	76	58	86	84	102	96	85	88	94	86
6	90	68	81	69	88	86	92	90	92	86	97	88
7	84	71	70	60	87	92	84	97	79	84	114	88
8	75	74	77	60	85	96	88	92	110	86	98	82
9	80	82	73	63	87	96	82	92	76	84	92	86
10	83	82	71	69	84	89	85	97	80	99	98	90
11	84	80	72	67	80	86	90	96	90	106	81	90
12	90	76	76	71	78	90	90	90	170	99	81	90
13	93	75	78	68	68	88	101	85	85	98	86	94
14	94	76	80	69	71	90	91	87	86	155	92	98
15	85	82	82	70	74	93	92	88	101	96	94	106
16	84	92	77	71	78	91	92	92	101	97	100	103
17	85	92	80	77	71	96	92	61	97	84	125	115
18	84	89	80	80	79	89	82	65	90	96	60	99
19	91	81	79	83	70	86	86	69	100	113	50	98
20	93	79	81	78	75	90	88	71	95	114	60	100
21	82	79	83	69	80	90	82	75	95	114	75	105
22	82	81	85	90	87	102	89	85	110	118	64	102
23	82	81	79	87	87	84	87	64	105	118	66	107
24	87	78	72	87	84	86	82	73	105	98	70	107
25	93	74	70	82	86	77	82	68	95	114	74	106
26	89	73	69	77	82	90	82	71	102	92	77	99
27	95	72	64	80	78	84	100	75	90	88	67	105
28	95	77	65	82	80	92	87	76	100	78	77	119
29	84	66	65	91	---	96	86	77	120	61	83	121
30	80	71	63	98	---	99	85	84	110	69	108	122
31	80	---	63	97	---	97	---	90	---	85	86	---
MEAN	85	81	75	75	81	90	89	83	97	96	84	98

WTR YR 1985 MEAN 86 MAX 170 MIN 50

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20.0	9.0	10.0	4.0	11.0	17.0	17.0	27.0	20.0	25.0	21.0
2	---	20.0	9.0	10.0	5.0	12.0	16.0	20.0	26.0	19.0	21.0	21.0
3	---	17.0	10.0	15.0	4.0	12.0	16.0	20.0	22.0	18.0	20.0	21.0
4	---	13.0	8.0	10.0	4.0	13.0	12.0	21.0	22.0	20.0	19.0	21.0
5	---	13.0	9.0	8.0	4.0	15.0	16.0	22.0	22.0	20.0	19.0	23.0
6	---	14.0	9.0	8.0	5.0	13.0	16.0	17.0	23.0	20.0	21.0	23.0
7	---	12.0	9.0	6.0	5.0	12.0	16.0	18.0	23.0	21.0	21.0	23.0
8	---	10.0	5.0	6.0	2.0	13.0	16.0	20.0	20.0	20.0	22.0	23.0
9	---	10.0	5.0	5.0	4.0	13.0	13.0	17.0	20.0	22.0	23.0	23.0
10	---	11.0	5.0	5.0	5.0	14.0	13.0	21.0	21.0	23.0	22.0	24.0
11	---	12.0	8.0	5.0	2.0	12.0	16.0	22.0	22.0	22.0	23.0	24.0
12	---	11.0	7.0	5.0	3.0	13.0	18.0	24.0	23.0	23.0	23.0	22.0
13	---	9.0	7.0	5.0	3.0	14.0	15.0	25.0	19.0	23.0	24.0	19.0
14	---	10.0	9.0	4.0	2.0	12.0	14.0	21.0	17.0	23.0	24.0	13.0
15	---	9.0	10.0	3.0	3.0	12.0	16.0	24.0	18.0	23.0	24.0	15.0
16	---	9.0	10.0	3.0	3.0	12.0	16.0	21.0	20.0	24.0	24.0	20.0
17	---	10.0	11.0	3.0	7.0	11.0	15.0	19.0	20.0	24.0	23.0	20.0
18	---	10.0	11.0	4.0	8.0	11.0	16.0	20.0	22.0	23.0	22.0	15.0
19	---	9.0	10.0	3.0	8.0	12.0	17.0	22.0	22.0	23.0	19.0	15.0
20	---	9.0	13.0	4.0	9.0	12.0	17.0	17.0	20.0	24.0	20.0	16.0
21	---	8.0	13.0	4.0	9.0	13.0	22.0	20.0	20.0	25.0	23.0	18.0
22	---	6.0	15.0	3.0	10.0	11.0	18.0	21.0	20.0	25.0	20.0	19.0
23	---	4.0	12.0	4.0	12.0	11.0	18.0	20.0	21.0	24.0	23.0	18.0
24	---	5.0	10.0	4.0	14.0	11.0	19.0	18.0	21.0	24.0	22.0	20.0
25	---	4.0	11.0	4.0	14.0	12.0	19.0	16.0	22.0	22.0	20.0	20.0
26	---	8.0	9.0	4.0	13.0	13.0	18.0	19.0	23.0	22.0	20.0	19.0
27	21.0	9.0	9.0	3.0	14.0	13.0	18.0	19.0	21.0	22.0	20.0	19.0
28	21.0	9.0	12.0	4.0	13.0	13.0	19.0	20.0	21.0	21.0	20.0	19.0
29	21.5	11.0	11.0	3.0	---	13.0	19.0	20.0	22.0	20.0	24.0	15.0
30	21.0	11.0	11.0	3.0	---	14.0	17.0	20.0	21.0	20.0	21.0	15.0
31	21.0	---	11.0	4.0	---	15.0	---	20.0	---	21.0	20.0	---
MEAN	21.0	10.5	9.5	5.0	7.0	12.5	16.5	20.0	21.5	22.0	21.5	19.5

WTR YR 1985 MEAN 15.0 MAX 27.0 MIN 2.

PEE DEE RIVER BASIN

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	152	878	34	196	34	180	21	88	540	7960	36	204
2	95	818	32	171	27	133	35	152	605	16800	39	219
3	42	210	35	165	19	92	286	2180	400	8320	33	181
4	30	142	35	170	16	78	210	2230	182	1810	33	181
5	32	147	37	208	15	73	250	3710	68	569	34	177
6	34	151	55	416	61	369	125	1140	54	486	33	168
7	27	120	38	239	35	232	55	379	47	368	28	142
8	26	116	25	135	20	105	27	167	45	332	27	133
9	28	122	20	97	13	65	19	109	44	291	32	162
10	29	125	18	87	10	49	16	86	40	238	33	168
11	25	108	21	105	10	47	16	85	25	153	28	138
12	23	99	23	118	10	47	10	50	280	3760	30	148
13	24	104	18	87	21	99	9	44	490	10300	31	149
14	24	104	16	76	23	107	10	48	310	3730	30	144
15	21	91	13	60	22	102	13	63	220	2180	26	125
16	24	104	17	77	20	92	9	43	150	1220	25	116
17	30	130	18	83	26	120	19	87	80	518	24	109
18	30	131	14	65	24	107	24	126	40	257	23	104
19	25	111	13	62	23	101	11	55	35	216	21	95
20	22	101	22	110	22	96	9	43	33	200	20	88
21	24	110	14	67	23	99	7	29	31	176	22	97
22	22	103	10	46	24	104	8	27	31	174	94	452
23	31	174	9	40	26	112	10	38	31	170	65	421
24	33	172	9	41	32	138	13	56	33	185	46	298
25	35	176	7	31	16	68	12	52	37	208	33	185
26	35	176	7	31	14	59	16	69	110	742	28	142
27	31	149	7	30	11	46	22	96	62	460	26	125
28	29	138	11	48	14	59	23	101	41	266	28	135
29	29	138	50	316	16	67	38	176	---	---	31	145
30	58	351	58	470	19	79	19	91	---	---	27	122
31	36	233	---	---	20	82	12	61	---	---	26	114
TOTAL	---	5832	---	3847	---	3207	---	11681	---	62089	---	5187

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	31	141	48	196	95	408	97	393	168	835	72	437
2	35	163	48	184	82	343	81	330	162	940	64	342
3	26	117	55	223	68	281	94	393	128	588	57	274
4	26	114	59	245	62	253	79	296	110	413	53	230
5	30	130	53	212	58	229	62	209	94	325	42	184
6	25	109	46	163	154	898	67	219	80	253	34	147
7	28	138	39	134	208	1360	69	218	68	215	38	162
8	26	124	35	121	340	3190	65	198	71	263	36	147
9	19	85	36	123	290	1860	53	150	221	1500	39	164
10	19	83	39	135	240	1100	49	130	185	994	35	141
11	20	86	52	190	145	572	53	142	113	445	35	126
12	26	112	41	154	300	2650	69	207	95	351	35	129
13	25	107	34	138	238	1310	84	254	75	271	28	100
14	20	85	32	128	228	923	310	1440	68	231	22	77
15	18	76	27	108	133	488	136	492	70	225	23	78
16	27	131	554	9010	104	373	268	1270	67	206	22	72
17	45	254	509	8340	107	416	239	1080	90	326	23	74
18	44	253	314	2860	103	392	119	379	1910	71500	24	78
19	34	166	262	1700	93	324	120	330	655	38000	16	51
20	33	149	158	811	86	286	90	240	316	4080	16	50
21	33	143	100	462	79	235	75	189	451	6050	21	64
22	32	133	111	629	68	206	70	175	395	4560	15	45
23	34	130	945	15200	60	178	118	414	198	1720	18	53
24	34	136	930	10100	53	156	103	300	147	1100	18	49
25	53	249	518	4350	61	189	108	362	112	741	19	54
26	55	318	309	2040	64	199	322	2530	282	3160	19	53
27	40	186	201	1120	65	191	319	2080	270	2310	19	52
28	40	176	168	780	63	172	374	3010	290	2810	16	43
29	41	183	115	546	54	140	390	3650	177	1380	16	42
30	42	185	99	454	60	191	229	1370	105	692	15	38
31	---	---	105	462	---	---	135	631	92	601	---	---
TOTAL	---	4462	---	61310	---	19513	---	23081	---	147085	---	3556

TOTAL LOAD FOR YEAR: 350850 TONS.

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/23	1150	WATER	0	2.02	2050	81	7.10	22.0	6.3	6.9	10K
84/11/15	1055	WATER	0	1.92	1700	73	7.30	8.0	6.6	11.0	50
84/12/04	1210	WATER	0	1.82	1850	68	7.40	7.0	14.0	11.2	150
85/01/21	1140	WATER	0	1.53	1560	63	6.90	.0	4.4	13.0	60
85/02/13	1120	WATER	0	7.13	7610	55	6.60	4.0		11.4	3800
85/03/14	1110	WATER	0	1.76	1790	69	7.40	13.0		10.2	240
85/04/02	1110	WATER	0	1.70	1730	78	7.30	15.0	3.4	9.3	10
85/05/02	1140	WATER	0	1.40	1440	94	7.10	20.0		7.6	380
85/06/04	1120	WATER	0	1.48	1510	83	7.50	25.0		7.2	160
85/07/09	1100	WATER	0	1.00	1060	90	7.50	25.0	28.0	7.2	400
85/08/15	1110	WATER	0.1	1.18	1230	93	7.40	27.0		6.8	30
85/09/04	1130	WATER	0.1	1.61	1640	93	7.40	26.0		7.4	

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4-N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/23	1150	WATER	0	22	25	100	.86	.030	.300	.280	.190
84/11/15	1055	WATER	0	22	11	92	.63	.030	.300	.210	.170
84/12/04	1210	WATER	0	21	15	110	.74	.050	.400	.230	.170
85/01/21	1140	WATER	0	20	7	56	.54	.090	.300	.160	.100
85/02/13	1120	WATER	0	12	240	370	.66	.100	.600	.420	.040
85/03/14	1110	WATER	0	21	29	98	.56	.020	.200	.220	.140
85/04/02	1110	WATER	0	19	28	130	.86	.020	.200	.240	.150
85/05/02	1140	WATER	0	22	37	110	.75	.060	.300	1.100	.160
85/06/04	1120	WATER	0	21	50	140	1.30	.030	.200	.310	.190
85/07/09	1100	WATER	0	22	40	140	1.10	.020	.400	.270	.150
85/08/15	1110	WATER	0.1	23	63	150	.70	.090	.300	.250	.170
85/09/04	1130	WATER	0.1	23	58	160	1.10	.020	.300	.270	.150

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/23	1150	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/21	1140	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/02	1110	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/09	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PEE DEE RIVER BASIN

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC

LOCATION.--Lat 35°50'41", long 80°39'34", Rowan County, Hydrologic Unit 03040102, on right bank 90 ft downstream from bridge on Secondary Road 1972, 1 mi upstream from Little Creek, 4 mi downstream from Fifth Creek, 4.5 mi upstream from Hunting Creek, and 6.5 mi southwest of Mocksville.

DRAINAGE AREA.--306 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 663.62 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. The city of Statesville diverted an average of 6.9 ft^3/s for water supply and waste-treatment dilution. The Alexander Water Corporation withdrew an average of 1.6 ft^3/s for water supply. Yadkin, Inc. stage telephone telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--47 years, 343 ft^3/s, 15.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft^3/s Oct. 17, 1964; maximum gage height, 18.59 ft Sept. 23, 1979; minimum, 30 ft^3/s Aug. 14, 16, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Oct. 3, 1929 reached a stage of 22.6 ft, from floodmark established by local resident (discharge, about 22,000 ft^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 2,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 19	0800	*2,310	*8.26				

Minimum discharge, 76 ft^3/s July 23, gage height, 1.63 ft; minimum daily, 84 ft^3/s July 20, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	170	197	162	1110	273	199	148	138	161	231	230
2	256	175	184	169	1910	260	208	149	131	166	209	205
3	177	165	211	250	1230	263	191	172	136	145	188	188
4	159	173	204	735	614	244	180	167	140	130	156	165
5	155	215	210	887	488	248	185	144	135	147	134	152
6	154	217	306	471	542	231	197	135	238	150	125	145
7	151	190	285	329	503	229	219	140	379	123	118	146
8	156	170	224	289	402	231	201	131	1730	118	155	141
9	156	168	209	249	326	221	179	133	517	109	332	142
10	160	167	198	233	302	217	173	145	267	103	201	138
11	151	168	199	229	324	223	184	143	208	114	154	130
12	145	182	187	212	1440	214	179	149	242	112	129	125
13	153	167	184	202	1200	211	176	152	300	100	134	126
14	149	165	180	204	621	213	181	135	198	104	119	125
15	147	161	179	191	458	210	182	308	164	106	106	113
16	151	162	173	180	381	211	212	1680	154	113	104	111
17	150	168	177	197	348	201	224	749	161	167	223	112
18	149	158	173	207	315	194	226	365	152	110	1480	115
19	156	165	177	200	302	200	198	239	134	90	1710	110
20	152	189	171	188	285	189	177	192	130	84	483	105
21	153	171	169	143	277	193	167	172	124	88	1350	104
22	193	160	186	e145	268	225	167	175	114	84	689	104
23	270	167	179	e160	252	333	162	193	110	93	359	109
24	203	161	176	e190	246	296	154	177	120	140	277	110
25	178	158	166	e190	258	241	193	176	119	122	309	97
26	176	168	169	e190	402	220	193	160	104	191	303	93
27	169	163	163	e180	375	220	160	158	105	264	285	94
28	164	187	167	198	311	205	154	142	99	196	398	96
29	173	317	172	205	---	207	162	142	99	301	292	90
30	200	236	162	187	---	215	151	137	118	334	328	97
31	195	---	164	224	---	201	---	137	---	262	272	---
TOTAL	5362	5383	5901	7796	15490	7039	5534	7345	6756	4527	11353	3818
MEAN	173	179	190	251	553	227	184	237	225	146	366	127
MAX	270	317	306	887	1910	333	226	1680	1730	334	1710	230
MIN	145	158	162	143	246	189	151	131	99	84	104	90
CFSM	.57	.58	.62	.82	1.81	.74	.60	.77	.74	.48	1.20	.42
IN.	.65	.65	.72	.95	1.88	.86	.67	.89	.82	.55	1.38	.46

CAL YR 1984 TOTAL 155642 MEAN 425 MAX 4730 MIN 122 CFSM 1.39 IN. 18.92
WTR YR 1985 TOTAL 86304 MEAN 236 MAX 1910 MIN 84 CFSM .77 IN. 10.49

e Estimated

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/23	1035	WATER	0	2.60	280	55	6.90	21.0	40.0	6.6	1300
84/11/15	0955	WATER	0	2.13	161	51	7.10	6.0		11.5	80
84/12/04	1100	WATER	0	2.32	205	44	7.30	6.0		11.2	610
85/01/21	1030	WATER	0	2.05	145	43	7.60	.0	6.4	13.5	60
85/02/13	1035	WATER	0	5.18	1200	43	6.70	4.0		11.0	1700
85/03/14	1025	WATER	0	2.36	215	52	7.20	12.0		10.2	300
85/04/02	1015	WATER	0	2.34	210	51	7.00	13.0	7.2	9.4	240
85/05/02	1040	WATER	0	2.19	174	57	7.50	18.0		8.2	580
85/06/04	1030	WATER	0	2.03	140	62	7.60	23.0		7.5	120
85/07/09	1000	WATER	0	1.85	109	63	7.60	23.0	32.0	7.4	200
85/08/15	1025	WATER	0.1	1.81	102	69	7.60	24.0		7.2	220
85/09/04	1045	WATER	0.1	2.14	163	66	7.70	23.0		7.5	410

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/23	1035	WATER	0	21	52	140	.18	.020	.300	.100	.010
84/11/15	0955	WATER	0	20	2	59					
84/12/04	1100	WATER	0	20	8	90					
85/01/21	1030	WATER	0	21	6	300	.45	.040	.100	.010	.010K
85/02/13	1035	WATER	0	10	260	410					
85/03/14	1025	WATER	0	21	24	84					
85/04/02	1015	WATER	0	20	23	180	.35	.020	.100	.030	.010K
85/05/02	1040	WATER	0	23	31	94					
85/06/04	1030	WATER	0	24	50	130					
85/07/09	1000	WATER	0	25	44	110	.48	.030	.200	.080	.010
85/08/15	1025	WATER	0.1	22	43	110					
85/09/04	1045	WATER	0.1	25	47	120					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/23	1035	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/21	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/02	1015	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/09	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02118500 HUNTING CREEK NEAR HARMONY, NC

LOCATION.--Lat 36°00'00", long 80°44'44", Iredell County, Hydrologic Unit 03040102, on right bank 52 ft downstream from bridge on Secondary Road 2115, 0.8 mi downstream from Kennedy Creek, 1 mi east of Houstonville, 2 mi downstream from U.S. Highway 21, and 3.5 mi northeast of Harmony.

DRAINAGE AREA.--155 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1723.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 734.78 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 5, 1951, nonrecording gage on upstream side of bridge at same datum.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHAGE.--35 years, 206 ft^3/s, 18.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft^3/s Sept. 22, 1979, gage height, 25.05 ft, from high-water mark in gage house; minimum, 18 ft^3/s Oct. 8, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 18	0700	*3,200	*9.99	No other peak greater than base discharge.			

Minimum discharge, 61 ft^3/s June 28, July 22, 23; minimum gage height, 0.27 ft June 28; minimum daily, 62 ft^3/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	116	120	101	689	140	115	83	82	120	154	115
2	139	115	114	107	1010	138	107	85	79	125	136	107
3	118	109	126	264	490	134	105	91	83	108	106	100
4	112	123	117	666	281	131	104	85	78	92	92	96
5	108	171	128	457	226	130	103	81	75	99	83	93
6	106	136	210	254	222	123	121	79	85	86	80	90
7	107	118	150	199	209	120	115	78	174	83	82	87
8	110	113	132	173	178	119	106	76	146	78	224	91
9	111	111	122	155	161	120	102	76	104	71	153	88
10	108	111	118	144	161	118	101	79	90	71	116	86
11	106	116	116	139	153	116	101	83	130	70	96	82
12	106	115	114	132	890	116	99	86	310	69	93	82
13	105	110	114	127	447	114	98	84	116	93	85	81
14	104	108	112	130	271	113	99	78	93	79	77	82
15	103	107	111	123	218	112	101	83	87	95	72	78
16	104	107	109	124	185	110	111	302	86	183	70	77
17	104	105	108	131	171	109	124	244	86	93	164	76
18	107	104	107	128	162	108	110	131	81	76	1920	75
19	107	115	107	125	157	106	103	102	77	69	395	74
20	105	114	107	121	154	106	98	90	74	67	201	72
21	109	106	111	90	146	106	94	85	72	65	314	71
22	164	104	112	142	142	138	91	98	71	63	236	71
23	139	103	108	139	141	212	88	383	71	64	149	71
24	121	104	104	132	140	151	90	195	70	67	129	71
25	121	104	103	138	143	132	113	141	70	101	144	69
26	119	103	102	170	192	121	96	112	69	178	154	67
27	115	103	101	128	167	117	89	96	69	132	138	67
28	113	164	102	127	148	115	89	87	62	336	267	66
29	136	203	101	128	---	113	89	83	64	356	163	65
30	127	133	101	119	---	112	85	81	147	217	182	65
31	118	---	101	132	---	110	---	82	---	190	141	---
TOTAL	3726	3551	3588	5245	7654	3810	3047	3539	2901	3596	6416	2415
MEAN	120	118	116	169	273	123	102	114	96.7	116	207	80.5
MAX	274	203	210	666	1010	212	124	383	310	356	1920	115
MIN	103	103	101	90	140	106	85	76	62	63	70	65
CFSM	.77	.76	.75	1.09	1.76	.79	.66	.74	.62	.75	1.34	.52
IN.	.89	.85	.86	1.26	1.84	.91	.73	.85	.70	.86	1.54	.58

CAL YR 1984 TOTAL 94480 MEAN 258 MAX 3560 MIN 94 CFSM 1.66 IN. 22.68
WTR YR 1985 TOTAL 49488 MEAN 136 MAX 1920 MIN 62 CFSM .88 IN. 11.88

02118500 HUNTING CREEK NEAR HARMONY, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/04	1400	WATER	0	1.04	113	45	7.30	13.0		10.6	290
84/11/08	1435	WATER	0	1.06	112	49	6.60	8.0	4.5	13.3	180
84/12/05	1525	WATER	0	1.14	123	50	6.70	5.0		12.4	670
85/01/21	1400	WATER	0	.54	78	52	6.50	.0		11.8	110
85/02/07	1100	WATER	0	1.54	212	48	6.60	4.0	13.0	12.9	150
85/03/13	1025	WATER	0	.94	114	51	6.30	9.0		12.3	160
85/04/28	0940	WATER	0	.88	112	56	6.50	15.0		11.3	480
85/05/09	1200	WATER	0	.54	76	44	6.70	16.0	9.8	10.2	340
85/06/18	1005	WATER	0	.48	81	54	6.80	22.0		7.8	540
85/07/24	1210	WATER	0	.35	66	50	6.40	21.0		8.4	600
85/08/19	1120	WATER	0.1	2.32	356	60	6.80	21.0	55.0	7.2	4100
85/09/18	1210	WATER	0.1	.50	72	61	6.20	14.0			230

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/04	1400	WATER	0	16	6	40					
84/11/08	1435	WATER	0	15	1	47	.39	.020	.200	.030	.010
84/12/05	1525	WATER	0	12	3	79					
85/01/21	1400	WATER	0	16	71	99					
85/02/07	1100	WATER	0	11	10	140	.81	.060	.300	.050	.020
85/03/13	1025	WATER	0	13	2	74					
85/04/28	0940	WATER	0	16	17	73					
85/05/09	1200	WATER	0	14	8	95	.62	.050	.200	.040	.010
85/06/18	1005	WATER	0	20	35	98					
85/07/24	1210	WATER	0	17	22	170					
85/08/19	1120	WATER	0.1	12	140	280	.70	.120	.600	.210	.010
85/09/18	1210	WATER	0.1	18	8	120					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/08	1435	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/07	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/09	1200	WATER	0	10K	20K	50K	20K	100K	1.3	100K	20K
85/08/19	1120	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PEE DEE RIVER BASIN

02120780 SECOND CREEK NEAR BARBER, NC

LOCATION.--Lat 35°43'05", long 80°35'45", Rowan County, Hydrologic Unit 03040102, on right bank 70 ft upstream from bridge on U. S. Highway 70, 1.3 mi downstream from Withrow Creek, and 2.7 mi east of Barber.

DRAINAGE AREA.--118 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-57, 1961-63. April 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 642.31 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some diurnal fluctuation caused by industry 0.7 mi upstream.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Rescources and Community Development.

AVERAGE DISCHARGE.--6 years, 101 ft^3/s, 11.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft^3/s Apr. 10, 1984, gage height, 14.50; minimum, 8.6 ft^3/s Sept. 20, 1983, gage height, 1.18 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	0830	*1,860	*11.98	Aug. 25	0230	1,840	11.90
Feb. 2	0830	1,800	11.75				

Minimum discharge, 21 ft^3/s Sept. 23, 27; minimum gage height, 1.55 ft July 22, Aug. 15; minimum daily 25 ft^3/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	40	44	49	1520	110	63	41	e42	65	41	e56
2	42	40	44	51	1390	104	60	45	e42	44	46	e52
3	39	38	82	152	383	97	59	66	e41	41	37	e48
4	38	50	52	327	248	94	59	47	e41	38	35	e46
5	37	56	86	160	272	92	58	44	e41	39	34	e44
6	36	45	116	94	374	86	67	42	97	41	34	e43
7	38	41	62	81	255	84	59	40	181	54	35	e42
8	39	41	56	73	169	84	57	40	385	36	35	e41
9	39	41	53	68	146	83	56	42	105	34	35	e41
10	39	41	51	65	136	80	56	50	e90	33	38	e40
11	38	48	50	64	136	79	57	48	e78	36	32	e39
12	38	44	49	61	502	78	55	61	e66	33	31	e39
13	38	43	48	61	203	75	55	43	e56	46	29	32
14	38	43	47	61	148	76	56	40	e50	97	28	31
15	37	43	47	56	128	71	59	40	e48	49	26	31
16	36	43	47	52	112	66	68	301	e47	40	27	30
17	39	42	47	57	106	69	59	241	e46	42	297	30
18	41	42	46	56	99	64	54	94	e44	31	312	30
19	41	44	46	53	97	62	52	74	e65	32	73	29
20	41	43	46	51	95	63	51	e64	44	31	52	29
21	42	42	49	e40	90	64	49	e60	36	29	529	29
22	50	[illegible]	55	e45	89	87	47	e57	38	34	129	29
23	45	[illegible]	53	e48	87	98	46	e55	37	47	71	28
24	42	[illegible]	51	e50	86	80	48	e52	36	42	385	27
25	43	[illegible]	51	e50	88	73	58	e50	35	59	961	34
26	39	[illegible]	50	e52	296	68	47	e48	34	57	156	28
27	39	44	50	e56	171	66	46	e45	33	58	110	26
28	39	57	50	e55	124	65	47	e44	32	49	e90	25
29	41	56	50	e54	---	65	44	e43	43	67	e80	26
30	44	46	50	e54	---	65	42	e42	56	47	e70	26
31	41	---	50	92	---	63	---	e42	---	55	e60	---
TOTAL	1279	1329	1678	2288	7550	2411	1634	2001	1989	1416	3918	1051
MEAN	41.3	44.3	54.1	73.8	270	77.8	54.5	64.5	66.3	45.7	126	35.0
MAX	80	57	116	327	1520	110	68	301	385	97	961	56
MIN	36	38	44	40	86	62	42	40	32	29	26	25
CFSM	.35	.38	.46	.63	2.29	.66	.46	.55	.56	.39	1.07	.30
IN.	.40	.42	.53	.72	2.38	.76	.52	.63	.63	.45	1.24	.33

CAL YR 1984 TOTAL 45718 MEAN 125 MAX 2290 MIN 27 CFSM 1.06 IN. 14.41
WTR YR 1985 TOTAL 28544 MEAN 78.2 MAX 1520 MIN 25 CFSM .66 IN. 9.00

e Estimated

02120780 SECOND CREEK NEAR BARBER, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/21	1150	WATER	0	1.93	40	108	6.90	1.0	7.7	11.8	150
85/02/14	1300	WATER	0	2.98	145	103	6.60	3.0	50.0	13.8	730
85/03/07	1250	WATER	0	2.35	84	88	6.50	7.0	24.0	13.4	390
85/04/22	1240	WATER	0	1.94	50	129	7.10	18.0	24.0	11.0	630
85/05/15	1320	WATER	0	1.82	41	50	6.70	21.0	39.0	8.4	1400
85/06/17	1300	WATER	0	1.94	50	136	7.00	21.0	35.0	8.0	1200
85/07/11	1240	WATER	0	1.82	41	194	7.30	22.0	40.0	8.6	2800
85/08/29	1240	WATER	0.1	2.36	85	115	6.40	22.0	40.0	8.6	3500
85/09/24	1220	WATER	0.1	1.68	32	139	6.60	24.0	33.0	8.2	890

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/21	1150	WATER	0	51	7	110	.65	.090	.300	.090	.010
85/02/14	1300	WATER	0	27	50	160	.89	.020	.300	.110	.020
85/03/07	1250	WATER	0	37	21	170	.67	.030	.200	.100	.010
85/04/22	1240	WATER	0	45	42	180	.58	.080	.900	.200	.020
85/05/15	1320	WATER	0	46	62	190	.82	.090	.400	.160	.020
85/06/17	1300	WATER	0	51	55	140	.63	.150	.400	.190	.070
85/07/11	1240	WATER	0	50	52	230	.66	.250	.600	.230	.110
85/08/29	1240	WATER	0.1	43	44	190	.58	.070	.400	.160	.040
85/09/24	1220	WATER	0.1	62	55	170	.43	.310	.200	.140	.040

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/14	1300	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/15	1320	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/29	1240	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PEE DEE RIVER BASIN

02121180 NORTH POTTS CREEK AT LINWOOD, NC

LOCATION.--Lat 35°45'28", long 80°19'24", Davidson County, Hydrologic Unit 03040103, near center of span on downstream side of bridge on Secondary Road 1134, 0.3 mi upstream from mouth, and 0.5 mi northeast of Linwood.

DRAINAGE AREA.--9.62 mi^2.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--May 1979 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 630 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for June 18 to Sept. 30, which are fair, and those for estimated daily discharges, which are poor. Slight diurnal fluctuation at low flows in growing season.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Recources and Community Development.

AVERAGE DISCHARGE.--6 years, 9.49 ft^3/s, 13.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 992 ft^3/s June 17, 1979, gage height, 7.97 ft; minimum, 1.0 ft^3/s Aug. 28, 29, 1981; minimum daily, 1.2 ft^3/s Oct. 8, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 190 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	0400	444	5.55	June 7	2200	343	4.95
Feb. 2	0500	473	5.71	Aug. 21	0730	*499	*5.85
Feb. 12	Unkown	Unknown	Unknown	Aug. 24	2400	475	5.72

Minimum discharge, 2.2 ft^3/s June 26, gage height, 1.09 ft; minimum daily, 3.0 ft^3/s June 26, 27, Aug. 15, Sept. 15, 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	4.3	e6.4	4.0	186	8.1	4.8	4.0	5.4	6.2	4.4	e5.0
2	4.7	4.3	e8.0	4.5	186	7.4	4.7	4.2	5.4	4.3	4.7	e4.6
3	4.2	4.0	e9.6	25	26	7.0	4.7	6.2	5.4	3.9	3.5	e4.3
4	4.1	5.0	e6.6	42	15	7.0	4.7	4.4	5.5	3.7	3.3	e4.0
5	4.1	4.8	e10	15	22	6.6	4.6	4.2	9.9	3.7	3.2	e4.0
6	4.1	4.6	e18	9.0	27	6.0	5.0	4.0	8.9	3.7	3.4	e3.9
7	4.3	4.2	e10	8.4	e20	5.8	4.9	3.9	78	4.1	3.3	e3.9
8	4.5	4.2	e6.0	6.3	e15	6.0	5.0	3.9	38	3.4	3.4	e3.9
9	4.3	4.2	e5.2	5.7	e13	6.0	4.7	4.0	11	3.3	3.6	e3.8
10	4.3	4.3	e4.7	5.4	e11	5.8	4.6	5.4	8.0	3.3	3.4	e3.7
11	4.3	4.9	e4.6	5.2	e40	5.6	4.7	8.7	6.2	3.4	3.2	e3.6
12	4.2	4.2	e4.6	4.9	e120	5.5	4.7	6.0	5.8	4.5	3.5	e3.6
13	4.2	4.2	e4.6	4.8	e35	5.3	4.7	4.6	5.0	9.8	3.4	3.3
14	4.1	4.1	e4.5	4.8	e15	5.4	4.7	4.1	4.5	6.8	3.2	3.1
15	4.1	4.0	e4.5	4.6	e10	5.4	5.5	4.0	4.4	11	3.0	3.0
16	4.1	4.0	e4.4	4.5	7.7	5.3	7.3	e47	4.6	e8.2	3.1	3.1
17	4.1	3.9	e4.4	5.4	7.3	5.5	5.3	31	4.4	e4.3	13	3.1
18	4.2	4.0	4.3	5.2	6.8	5.2	5.0	9.1	3.9	e4.0	8.8	3.1
19	4.3	e4.5	4.3	4.8	6.7	5.1	4.9	6.7	3.5	e3.7	4.6	3.1
20	4.2	e4.0	4.3	e4.6	6.5	5.2	4.7	5.7	3.9	e3.6	3.6	3.2
21	4.1	e4.0	4.3	e3.5	6.1	5.2	4.5	9.8	3.1	e3.6	138	3.3
22	4.3	e4.1	5.0	e4.3	6.0	8.9	4.4	15	3.1	3.6	15	3.3
23	4.3	e4.2	4.6	e4.5	6.0	8.4	4.3	10	4.1	4.2	8.5	3.3
24	4.4	e4.3	4.4	4.2	5.9	6.3	5.0	7.7	3.9	3.8	89	3.3
25	4.2	e4.3	4.3	4.3	6.5	5.6	5.5	6.9	3.1	9.5	66	3.1
26	4.2	e4.4	4.3	4.7	39	5.2	4.4	6.2	3.0	6.6	32	3.1
27	4.1	e4.4	4.2	5.3	13	5.2	4.4	5.9	3.0	6.3	19	3.0
28	4.1	e12	4.2	4.4	9.1	5.2	4.4	5.7	3.4	4.9	14	3.0
29	4.3	e7.0	4.2	4.4	---	5.2	4.2	5.7	4.0	6.5	8.7	3.0
30	4.2	e6.0	4.1	4.5	---	5.1	4.1	5.6	6.9	4.8	e7.0	3.1
31	4.3	---	4.1	21	---	5.0	---	5.6	---	4.6	e6.0	---
TOTAL	135.4	140.4	176.7	239.2	857.6	184.5	144.4	255.2	259.3	157.3	488.8	104.8
MEAN	4.37	4.68	5.70	7.72	30.6	5.95	4.81	8.23	8.64	5.07	15.8	3.49
MAX	8.5	12	18	42	186	8.9	7.3	47	78	11	138	5.0
MIN	4.1	3.9	4.1	3.5	5.9	5.0	4.1	3.9	3.0	3.3	3.0	3.0
CFSM	.45	.49	.59	.80	3.18	.62	.50	.86	.90	.53	1.64	.36
IN.	.52	.54	.68	.92	3.32	.71	.56	.99	1.00	.61	1.89	.41

CAL YR 1984 TOTAL 4645.3 MEAN 12.7 MAX 377 MIN 3.4 CFSM 1.32 IN. 17.96
WTR YR 1985 TOTAL 3143.6 MEAN 8.61 MAX 186 MIN 3.0 CFSM .90 IN. 12.16

e Estimated

02121180 NORTH POTTS CREEK AT LINWOOD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/16	1340	WATER	0	1.27	4	71	7.20	4.0	9.0	12.5	480
85/02/20	1105	WATER	0	1.40	7	73	7.00	8.0		10.8	540
85/03/20	1145	WATER	0	1.33	5	72	7.50	10.0		11.4	440
85/04/17	1135	WATER	0	1.31	5	81	7.50	18.0	21.0	9.4	2000
85/05/16	1120	WATER	0	1.95	24	90	7.30	19.0		7.8	30000
85/06/05	1115	WATER	0	1.42	7	93	8.10	24.0		7.6	30000
85/07/09	1135	WATER	0	1.18	3	97	7.70	24.0		8.1	820
85/07/10	1105	WATER	0	1.18	3	85	7.90	25.0	12.0	8.0	1100
85/08/20	1040	WATER	0.1	1.20	4	94	7.70	24.0		7.7	1200
85/09/19	1115	WATER	0.1	1.15	3	87	7.70	17.0		9.6	620

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/16	1340	WATER	0	30	18	97	.75	.070	.200	.050	.020
85/02/20	1105	WATER	0	26	14	110					
85/03/20	1145	WATER	0	30	7	72					
85/04/17	1135	WATER	0	17	24	140	.48	.030	.300	.100	.020
85/05/16	1120	WATER	0	21	200	330					
85/06/05	1115	WATER	0	30	95	200					
85/07/09	1135	WATER	0	37							
85/07/10	1105	WATER	0	37	8	140	.44	.050	.200	.080	.030
85/08/20	1040	WATER	0.1	40	23	130					
85/09/19	1115	WATER	0.1	33	4	97					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/01/16	1340	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/17	1135	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/07/10	1105	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

0212429930 WIBERLY BRANCH BELOW SMITH LAKE NEAR MINT HILL, NC

LOCATION.--Lat 35°13'05", long 80°41'36", Mecklenburg County, Hydrologic Unit 03050103, at headwaters, in Harrisburg landfill, and 1.5 mi northwest of Wilgrove.

DRAINAGE AREA.-- 0.02 mi^2.

PERIOD OF RECORD.--December 1984 to September 1985.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1984 to September 1985.
WATER TEMPERATURE: December 1984 to September 1985.

INSTRUMENTATION.--Water-quality monitor since December 1984.

REMARKS.--Station operated as part of the Charlotte-Mecklenburg County Water-Quality Study.

COOPERATION.--Chemical samples were collected by the U. S. Geological Survey. Laboratory analyses, other than the organics, were performed by the Mecklenburg County Department of Environmental Health Laboratory. The analyses for the organics were performed by the U. S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 333 microsiemens Mar. 29; minimum, 52 microsiemens, Aug. 21, 24.
WATER TEMPERATURE: Maximum, 32.5°C June 6, 9, 10; minimum, 1.5°C Jan. 23, 24.

WATER QUALITY DATA, DECEMBER 1984 TO SEPTEMBER 1985

DATE	TIME	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAR 20...	1055	205	6.3	15.0	7.2	81	21	64	6.0	--
JUN 13...	1140	100	6.7	21.0	5.8	11	2.2	28	6.1	8.7
AUG 28...	1145	75	6.3	20.5	4.6	20	1.2	20	5.9	4.8

DATE	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
MAR 20...	<.2	156	<.50	<.010	.110	3	2	<100	<100	1
JUN 13...	<.2	77	<.50	.070	.050	1	<1	<100	<100	<1
AUG 28...	<.2	64	<.10	.210	.050	17	2	<100	<100	<1

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
MAR 20...	<1	4	2	<50	<50	4600	710	1	<1	3000
JUN 13...	<1	<1	<1	50	<50	2500	280	1	<1	440
AUG 28...	1	3	1	<50	<50	12000	610	1	<1	680

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR 20...	3000	.2	<.2	<1	1	<1	<1	100	<50
JUN 13...	410	<.2	<.2	<1	<1	1	<1	90	<50
AUG 28...	590	<.2	<.2	<1	<1	<1	<1	70	<50

SANTEE RIVER BASIN

0212429930 WIBERLY BRANCH BELOW SMITH LAKE NEAR MINT HILL, NC

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, DECEMBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	117	112	114
2							---	---	---	115	85	103
3							---	---	---	107	90	96
4							---	---	---	109	85	99
5							---	---	---	97	88	92
6							---	---	---	90	87	88
7							---	---	---	87	83	85
8							---	---	---	85	84	84
9							---	---	---	85	83	84
10							---	---	---	86	85	85
11							---	---	---	88	86	88
12							---	---	---	92	88	90
13							---	---	---	95	91	93
14							128	124	126	97	94	95
15							130	124	126	100	97	98
16							128	124	127	105	100	102
17							128	126	127	107	105	106
18							128	126	127	114	108	111
19							127	125	126	125	114	119
20							125	120	123	138	126	132
21							122	120	121	144	136	140
22							120	118	120	151	143	147
23							118	116	117	160	151	155
24							115	114	114	173	161	168
25							114	112	113	181	174	178
26							113	112	113	180	166	170
27							112	110	111	176	169	172
28							115	110	113	189	177	183
29							116	113	114	196	190	192
30							115	111	113	202	197	200
31							116	113	115	215	202	209
MONTH							130	110	119	215	83	125

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	165	98	110	170	162	165	304	283	290	256	241	249
2	106	97	103	171	166	168	298	279	289	243	231	235
3	116	104	110	173	168	170	298	266	277	231	204	213
4	127	117	122	173	171	173	278	234	253	255	212	230
5	123	119	122	182	173	177	243	223	231	256	215	236
6	121	113	116	181	177	179	242	220	230	230	217	221
7	133	118	126	183	178	180	235	198	214	232	215	219
8	138	129	133	182	177	179	207	198	202	216	212	214
9	145	135	140	187	180	183	215	202	207	213	205	210
10	151	141	146	191	185	187	228	206	216	---	---	---
11	141	119	132	192	186	189	235	217	224	---	---	---
12	134	113	123	196	190	193	225	217	222	---	---	---
13	138	130	134	199	192	195	226	220	222	---	---	---
14	141	134	137	203	196	199	237	221	226	---	---	---
15	144	137	140	206	200	203	241	214	233	---	---	---
16	142	139	140	214	205	211	229	204	219	---	---	---
17	141	137	139	217	212	214	241	219	230	---	---	---
18	142	137	141	216	213	215	228	210	215	---	---	---
19	148	141	144	214	209	212	227	215	221	---	---	---
20	152	145	150	208	200	205	240	222	229	---	---	---
21	153	145	147	201	198	200	229	221	226	129	121	123
22	181	150	164	198	192	197	227	219	223	131	127	129
23	177	145	162	206	197	201	226	220	223	132	130	131
24	139	135	136	213	203	208	222	209	216	134	133	133
25	139	133	136	210	205	207	218	210	214	137	132	135
26	---	---	---	214	204	209	221	213	217	141	134	137
27	---	---	---	276	206	227	220	217	218	140	136	138
28	165	160	163	324	279	307	222	214	219	140	135	139
29	---	---	---	333	307	321	228	218	223	143	139	140
30	---	---	---	316	297	306	254	223	239	143	141	142
31	---	---	---	317	295	309	---	---	---	144	143	143
MONTH	181	97	135	333	162	209	304	198	229	256	121	176

SANTEE RIVER BASIN

0212429930 WIBERLY BRANCH BELOW SMITH LAKE NEAR MINT HILL, NC

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, DECEMBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	147	144	146	113	101	110	102	101	102	95	90	93
2	148	146	147	106	104	105	101	100	101	102	96	99
3	152	147	149	113	105	106	105	100	103	109	101	107
4	153	119	148	108	105	106	109	104	107	113	110	112
5	151	139	148	107	106	107	114	108	110	115	112	113
6	149	72	133	108	106	107	121	114	118	115	102	112
7	89	75	83	110	108	109	121	119	120	113	102	109
8	84	77	81	111	108	109	120	115	117	111	107	108
9	92	84	88	112	109	110	118	116	117	109	106	108
10	95	91	93	111	109	110	119	118	119	111	102	105
11	95	93	94	114	110	111	120	119	119	105	97	101
12	99	92	97	113	111	112	120	120	120	108	99	105
13	101	99	100	113	112	112	122	120	121	113	102	107
14	103	100	102	114	112	113	122	121	121	114	103	108
15	103	87	100	113	112	113	127	121	122	107	100	103
16	98	95	97	116	112	113	123	104	121	101	98	100
17	118	97	105	114	111	113	118	72	94	100	98	99
18	102	100	101	114	112	113	100	76	88	101	99	100
19	102	101	102	115	111	113	110	101	106	101	98	99
20	103	101	102	114	112	113	110	89	102	100	97	98
21	103	101	102	116	111	113	89	52	69	110	98	101
22	104	101	102	114	112	112	73	61	66	109	102	105
23	106	103	104	114	112	112	78	74	75	112	106	109
24	109	106	107	113	95	109	84	52	67	120	110	114
25	122	106	110	104	102	103	73	58	67	116	106	109
26	111	107	110	104	103	103	78	64	69	118	105	110
27	112	110	111	105	99	102	73	68	70	117	94	103
28	113	111	112	101	99	100	80	74	78	108	101	104
29	114	103	113	102	100	100	89	81	86	110	106	108
30	113	110	112	103	101	102	91	74	86	116	105	111
31	---	---	---	102	101	102	89	73	83	---	---	---
MONTH	153	72	110	116	95	108	127	52	98	120	90	105
YEAR	333	52	141									

TEMPERATURE, WATER (DEG. C), DECEMBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1							---	---	---	14.0	11.5	12.5
2							---	---	---	13.5	12.5	13.0
3							---	---	---	12.5	10.0	11.5
4							---	---	---	10.5	9.0	9.5
5							---	---	---	9.0	8.5	8.5
6							---	---	---	8.5	7.5	8.0
7							---	---	---	8.0	7.0	7.5
8							---	---	---	7.5	6.5	7.0
9							---	---	---	7.5	6.5	6.5
10							---	---	---	6.5	6.0	6.5
11							---	---	---	6.5	6.0	6.0
12							---	---	---	6.0	5.5	5.5
13							12.5	8.5	11.5	5.5	5.0	5.5
14							12.5	9.0	10.5	5.0	4.5	5.0
15							14.0	9.0	11.0	5.5	4.0	4.5
16							12.5	9.0	11.0	5.0	3.5	4.0
17							14.0	10.0	11.5	5.0	4.0	4.5
18							15.5	10.5	12.5	5.5	4.5	5.0
19							14.5	11.5	13.0	6.0	5.0	5.5
20							14.0	13.0	13.5	5.5	3.5	5.0
21							15.0	13.0	14.0	3.0	2.5	3.0
22							14.5	12.0	13.5	3.0	2.0	2.5
23							12.0	9.0	11.0	3.0	1.5	2.0
24							10.5	8.0	9.5	3.5	1.5	2.5
25							11.5	9.0	10.0	4.5	2.5	3.5
26							9.5	8.0	8.5	4.0	3.5	3.5
27							12.0	8.5	10.0	3.5	2.5	3.0
28							12.0	9.0	10.5	3.5	3.5	3.5
29							13.0	10.0	11.5	4.0	3.0	3.5
30							14.5	11.0	12.5	4.5	3.5	4.0
31							13.0	11.5	12.0	5.0	4.0	4.5
MONTH							15.5	8.0	11.5	14.0	1.5	5.5

0212429930 WIBERLY BRANCH BELOW SMITH LAKE NEAR MINT HILL, NC

TEMPERATURE, WATER (DEG. C), DECEMBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	5.5	5.5	12.5	10.0	11.5	21.0	17.5	19.0	24.5	19.0	21.5
2	6.0	6.0	6.0	13.5	10.0	12.0	19.5	15.5	17.5	22.0	20.5	21.0
3	6.0	6.0	6.0	16.0	10.0	12.5	18.0	14.0	16.0	22.0	20.0	21.0
4	6.0	5.5	5.5	15.5	12.0	13.5	20.0	15.0	17.0	24.0	18.0	20.5
5	5.5	4.5	5.0	19.5	13.5	15.5	18.5	16.5	17.5	23.5	18.0	20.5
6	6.0	4.0	5.0	15.0	12.0	13.5	19.5	16.5	17.5	25.5	18.5	22.0
7	6.0	5.0	5.5	16.5	10.5	13.0	19.0	15.5	17.0	24.5	20.0	22.0
8	5.5	4.0	4.5	15.0	11.0	13.0	19.0	15.0	17.0	22.0	19.5	20.5
9	6.5	4.0	5.0	14.5	12.5	14.0	17.5	14.0	15.0	20.0	18.5	19.0
10	6.5	4.0	5.0	17.0	11.0	13.5	17.5	12.5	15.0	---	---	---
11	6.5	4.5	5.5	13.0	12.0	12.5	19.5	13.5	16.0	---	---	---
12	6.0	5.5	6.0	16.0	12.0	13.5	21.5	14.5	18.0	---	---	---
13	6.0	5.0	5.5	18.5	11.5	14.5	21.5	16.5	18.5	---	---	---
14	6.0	5.0	5.5	18.0	13.0	15.5	17.5	17.0	17.0	---	---	---
15	7.0	5.0	6.0	16.5	12.5	14.5	19.0	16.5	17.5	---	---	---
16	7.0	5.0	6.0	14.5	11.5	13.0	17.0	16.0	17.0	---	---	---
17	7.5	5.5	6.5	15.0	12.5	13.5	23.5	15.0	18.5	---	---	---
18	8.0	6.0	7.0	13.5	10.5	12.0	22.5	17.0	19.5	---	---	---
19	7.5	7.0	7.0	16.0	9.0	12.0	25.0	17.5	21.5	---	---	---
20	9.5	7.5	8.5	14.5	10.0	12.0	26.5	19.0	22.5	---	---	---
21	10.0	7.5	8.5	12.5	11.0	12.0	26.5	19.5	22.5	28.5	21.0	24.0
22	10.5	9.0	9.5	11.0	9.5	10.5	26.0	19.5	22.5	27.0	21.5	24.0
23	12.5	10.5	11.5	15.0	9.5	11.5	24.0	20.5	22.0	24.5	21.0	22.5
24	14.5	12.0	13.5	15.5	12.0	13.5	23.0	20.0	21.5	22.5	19.5	20.5
25	15.5	14.5	15.0	14.0	11.5	12.5	25.5	20.0	22.0	24.0	18.0	21.0
26	15.0	14.5	14.5	17.0	10.5	13.5	25.5	19.0	22.0	26.0	19.0	22.0
27	16.5	14.5	15.0	15.0	12.0	13.5	23.5	19.5	21.5	26.0	20.0	22.5
28	16.5	11.5	14.0	17.5	13.5	15.5	26.0	19.5	22.5	24.0	21.0	22.0
29	---	---	---	20.5	16.0	18.0	24.5	20.5	22.5	25.5	21.0	23.0
30	---	---	---	21.5	18.0	19.5	25.5	18.5	21.5	23.0	21.5	22.0
31	---	---	---	22.0	18.5	20.0	---	---	---	25.0	21.5	23.0
MONTH	16.5	4.0	8.0	22.0	9.0	13.5	26.5	12.5	19.0	28.5	18.0	21.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	29.0	23.0	25.5	25.5	24.0	24.5	29.0	25.5	27.0	22.5	21.0	22.0
2	26.5	23.0	24.5	28.5	23.5	25.5	27.0	24.5	25.5	23.0	21.5	22.5
3	28.5	23.0	25.5	29.5	23.0	26.0	26.5	23.0	24.5	23.0	21.5	22.5
4	30.0	24.0	26.5	29.5	23.5	26.5	26.5	22.0	24.0	23.0	22.0	22.5
5	32.0	25.0	28.0	27.5	24.5	25.5	26.0	22.0	24.0	23.5	22.5	23.0
6	32.5	24.0	27.0	26.0	24.5	25.0	26.5	23.5	25.0	23.5	22.5	23.0
7	29.0	23.5	25.0	29.0	24.5	26.5	27.5	24.0	25.5	23.5	22.5	23.0
8	29.0	22.5	25.0	29.5	24.5	26.5	26.0	24.5	25.0	24.0	23.0	23.5
9	32.5	23.0	26.5	29.5	25.0	27.0	28.5	24.5	26.0	24.5	23.5	24.0
10	32.5	23.5	26.5	30.0	26.0	28.0	28.5	24.5	26.5	24.5	23.5	24.0
11	28.5	23.5	25.5	30.0	25.5	27.5	29.5	24.5	26.5	24.5	24.0	24.0
12	25.5	23.0	24.0	30.0	25.5	27.5	29.0	25.0	27.0	24.0	21.0	22.5
13	25.0	21.0	22.5	30.5	25.5	27.5	29.5	25.5	27.0	21.0	17.5	20.0
14	25.0	20.0	22.5	30.5	25.5	27.5	29.5	25.0	27.0	18.0	15.0	16.5
15	27.0	21.0	23.5	30.5	26.0	28.0	28.5	25.0	26.5	18.0	15.0	16.5
16	28.0	23.0	25.0	30.5	26.5	28.5	28.5	25.0	26.5	18.0	15.5	17.0
17	30.5	23.5	26.5	30.0	26.5	28.0	27.5	23.0	24.5	18.0	15.0	16.5
18	28.5	24.5	26.0	30.0	26.0	28.0	24.5	22.5	23.5	18.0	15.5	17.0
19	27.0	24.0	25.5	30.0	25.5	27.5	28.0	22.0	23.5	18.5	16.0	17.0
20	27.0	22.5	24.5	30.5	26.0	28.0	28.0	23.5	25.5	18.5	16.0	17.5
21	27.5	22.0	24.5	30.0	26.5	28.0	26.0	23.0	24.5	19.0	17.5	18.5
22	27.5	23.0	25.0	29.5	26.5	28.0	23.5	21.5	22.5	20.0	18.5	19.0
23	28.5	24.0	25.5	28.5	26.0	27.0	22.5	20.5	21.5	20.0	18.5	19.5
24	30.0	24.0	26.5	26.5	24.5	25.5	23.5	21.0	22.0	20.5	20.0	20.0
25	30.5	24.5	27.0	26.0	24.5	25.0	23.0	22.0	22.0	20.5	19.5	19.5
26	31.5	25.5	28.5	26.0	24.0	25.0	24.0	22.5	23.0	19.5	18.5	19.0
27	29.0	25.0	27.0	25.5	24.5	25.0	25.5	22.5	23.5	20.5	18.5	19.5
28	27.5	24.0	26.0	25.0	24.0	24.5	23.0	22.0	22.5	18.5	16.0	17.5
29	28.0	24.0	25.5	26.0	24.0	24.5	23.0	22.0	22.5	17.5	15.5	16.5
30	25.5	24.5	25.0	28.5	24.5	26.0	23.0	22.5	22.5	17.5	16.0	16.5
31	---	---	---	29.5	25.0	27.0	22.5	22.0	22.5	---	---	---
MONTH	32.5	20.0	25.5	30.5	23.0	26.5	29.5	20.5	24.5	24.5	15.0	20.0
YEAR	32.5	1.5	18.0									

02125000 BIG BEAR CREEK NEAR RICHFIELD, NC

LOCATION.--Lat 35°20'02", long 80°20'09", Stanly County, Hydrologic Unit 03040105, on left bank 300 ft downstream from Little Creek, 400 ft upstream from bridge on Secondary Road 1134, and 10 mi southwest of Richfield.

DRAINAGE AREA.--55.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1954 to current year.

REVISED RECORDS.--WSP 1503: 1955, 1956(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 426.62 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except those below 1 ft³/s, which are fair.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--31 years, 58.4 ft³/s, 14.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s Aug. 22, 1967, gage height, 15.95 ft; no flow at times 1954, 1961-64, 1966-69, 1972, 1976-77, 1980, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1921 reached a stage of about 19 ft, from information by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0400	2,710	8.29	May 16	0330	2,400	7.82
Feb. 2	0300	2,550	8.05	Aug. 17	2300	*2,740	*8.34

Minimum discharge, 0.21 ft³/s Oct. 16, 17, gage height, 0.72 ft; minimum daily, 0.25 ft³/s Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	.61	.79	1.4	1200	53	9.4	4.4	4.2	16	15	28
2	1.1	.61	.85	1.6	1330	44	8.6	4.1	3.4	10	11	18
3	.76	.60	8.3	102	289	36	8.1	30	3.1	6.8	7.9	14
4	.62	.78	2.3	484	126	31	7.8	17	2.7	5.2	5.4	11
5	.52	1.2	9.6	147	209	28	7.3	10	3.8	5.5	4.0	9.0
6	.45	1.1	26	57	306	24	7.9	7.7	50	4.1	3.1	7.8
7	.43	.85	9.4	40	177	20	7.2	6.3	79	6.2	2.5	7.3
8	.46	.76	6.3	29	90	19	6.5	5.4	226	3.9	2.2	6.3
9	.44	.75	4.8	21	62	18	6.1	5.7	39	2.9	1.9	5.6
10	.39	.76	3.9	17	50	18	5.8	8.4	17	2.1	1.6	5.1
11	.35	1.3	3.4	15	45	17	5.8	7.7	10	2.0	1.3	4.4
12	.33	1.3	2.8	13	439	18	5.5	6.8	7.8	1.7	1.0	4.0
13	.33	.94	2.7	11	143	16	5.5	6.1	6.5	1.8	.82	3.7
14	.32	.89	2.4	11	81	14	5.4	5.1	5.0	3.7	.65	3.1
15	.31	.87	2.2	10	59	12	5.9	4.2	5.5	2.9	.52	2.9
16	.26	.86	2.0	9.1	46	11	8.2	785	64	1.9	.42	2.7
17	.25	.87	1.9	11	38	11	22	216	14	1.3	424	2.6
18	.30	.85	1.9	16	33	11	12	110	7.0	.93	450	2.3
19	.33	.85	1.7	12	29	9.6	8.9	41	4.9	.75	50	2.2
20	.32	.87	1.7	12	31	9.2	7.5	23	3.8	.65	21	2.0
21	.30	.76	1.7	11	26	9.0	6.5	18	3.0	.53	163	1.9
22	.51	.76	1.8	8.0	23	21	5.5	21	2.4	.57	84	1.8
23	.82	.76	1.6	8.0	23	45	4.8	15	2.1	10	30	1.7
24	.67	.93	1.5	8.0	22	30	8.8	11	28	4.5	46	1.6
25	.58	.50	1.5	8.3	22	22	35	9.7	29	23	131	1.5
26	.51	.35	1.4	8.3	357	17	13	7.9	6.3	38	316	1.3
27	.52	.47	1.4	7.7	132	14	8.8	6.5	3.9	22	166	1.2
28	.60	1.1	1.4	7.7	72	13	7.4	5.4	2.8	17	73	1.0
29	.68	1.4	1.4	8.7	---	12	6.1	5.0	2.7	215	48	.92
30	.70	1.1	1.3	9.1	---	11	4.9	5.2	52	37	43	.85
31	.63	---	1.4	51	---	10	---	5.0	---	25	71	---
TOTAL	18.59	25.75	111.34	1155.9	5460	623.8	262.2	1413.6	688.9	472.93	2175.31	155.77
MEAN	.60	.86	3.59	37.3	195	20.1	8.74	45.6	23.0	15.3	70.2	5.19
MAX	3.8	[illegible]	26	484	1330	53	35	785	226	215	450	28
MIN	.25	[illegible]	.79	1.4	22	9.0	4.8	4.1	2.1	.53	.42	.85
CFSM	.01	.02	.06	.67	3.51	.36	.16	.82	.41	.28	1.26	.09
IN.	.01	.02	.07	.77	3.65	.42	.18	.95	.46	.32	1.46	.10

CAL YR 1984 TOTAL 35677.24 MEAN 97.5 MAX 2010 MIN .11 CFSM 1.75 IN. 23.87
WTR YR 1985 TOTAL 12564.09 MEAN 34.4 MAX 1330 MIN .25 CFSM .62 IN. 8.41

02125000 BIG BEAR CREEK NEAR RICHFIELD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/31	1000	WATER	0	1.24	12	84	6.80	3.0		14.4	70
85/02/20	1400	WATER	0	1.50	34	98	6.70	7.0	5.5	12.6	10K
85/03/14	1335	WATER	0	1.23	14	88	6.60	13.0		11.6	30
85/04/09	1345	WATER	0	1.08	5	88	6.90	12.0		11.8	40
85/05/13	1325	WATER	0	1.08	5	66	6.80	20.0	3.7	8.0	70
85/06/11	1315	WATER	0	1.19	9	108	6.90	23.0		7.6	250
85/07/22	1330	WATER	0	.77	.4	130	6.60	25.0		9.4	60
85/08/27	1320	WATER	0.1	2.39	152	108	6.50	22.0		8.6	
85/09/17	1300	WATER	0.1	.94	3	106	6.40	17.0		9.0	120

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/31	1000	WATER	0	15	2	71	.90	.010	.200	.010	.010K
85/02/20	1400	WATER	0	12	1K	110	1.60	.010K	.200	.020	.010
85/03/14	1335	WATER	0	16	2	76	.66	.010	.200	.020	.010K
85/04/09	1345	WATER	0	21	1	81	.29	.030	.200	.020	.010K
85/05/13	1325	WATER	0	29	6	100	1.10	.060	.400	.030	.010K
85/06/11	1315	WATER	0	25	18	110	1.90	.060	.400	.060	.010
85/07/22	1330	WATER	0	48	19	98	.33	.020	.200	.050	.010
85/08/27	1320	WATER	0.1	29	18	150	.74	.390	.600	.090	.020
85/09/17	1300	WATER	0.1	36	2	150	.84	.030	.200	.030	

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/20	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/13	1325	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	1320	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

PEE DEE RIVER BASIN

02126000 ROCKY RIVER NEAR NORWOOD, NC

LOCATION.--Lat 35°08'54", long 80°10'33", Stanly County, Hydrologic Unit 03040105, on left bank 1,000 ft downstream from Lanes Creek, 1.5 mi upstream from bridge on Secondary Road 1935, 6 mi southwest of Norwood, and 11.2 mi upstream from mouth.

DRAINAGE AREA.--1,372 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 852: 1937. WSP 1052: 1936(M). WSP 1503: 1935, 1945. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 212.91 ft above National Geodetic Vertical Datum of 1929, (levels by U. S. Army Corps of Engineers).

REMARKS.--Records good except those for periods of estimated daily discharges, which are poor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--56 years, 1,346 ft^3/s, 13.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 105,000 ft^3/s Sept. 18, 1945, gage height, 46.37 ft, from floodmark; minimum, 17 ft^3/s Oct. 8, 1954, gage height, 0.00 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1908 reached a stage of 35 ft, from information by local residents, discharge, 67,600 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	1400	28,800	19.81	Aug. 18	0500	*40,900	*25.14

Minimum discharge recorded, 118 ft^3/s Oct. 17, 18, Nov. 24, 25, 26, July 22, but may have been less during period of no gage-height record Oct. 1-16; minimum daily, 119 ft^3/s Nov. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e200	138	197	150	7020	1110	315	200	203	451	661	1200
2	e230	139	161	163	24200	882	303	195	189	804	403	701
3	e180	135	253	1490	15700	755	292	306	180	383	343	526
4	e140	134	592	5070	4610	655	282	535	181	278	245	442
5	e135	139	406	5140	2700	612	279	419	215	243	194	389
6	e130	179	1180	1920	9780	575	285	280	1490	273	173	344
7	e130	186	909	879	6020	511	288	242	3160	298	163	308
8	e130	159	438	630	2970	469	279	219	10000	206	166	276
9	e125	143	288	512	1770	458	244	213	5020	197	228	247
10	e125	136	235	434	1280	444	234	251	1340	165	189	248
11	e122	143	215	384	1070	416	237	317	678	154	165	230
12	e120	140	210	353	5280	409	239	307	561	166	144	230
13	e120	150	203	319	4850	403	239	419	408	166	147	203
14	e120	154	218	292	2450	381	233	308	329	184	137	188
15	e120	142	221	286	1520	361	238	242	280	229	133	175
16	e120	137	211	283	1140	348	398	4070	646	189	139	161
17	120	135	190	280	930	334	1650	6490	756	168	5390	159
18	120	133	174	317	803	330	952	3340	404	167	29600	162
19	120	126	174	360	721	323	542	1250	285	149	3690	162
20	124	126	176	319	724	311	414	699	244	143	1110	160
21	127	135	177	266	729	306	337	537	214	125	1990	157
22	134	137	175	215	661	379	288	444	194	123	8630	153
23	187	130	169	235	602	811	262	394	175	496	3840	147
24	197	121	168	280	574	793	248	338	167	483	1360	145
25	182	119	162	280	552	601	268	302	381	882	6360	136
26	165	119	150	265	2200	496	390	278	269	872	5610	134
27	153	123	147	229	3490	424	319	250	198	818	5650	133
28	144	144	145	222	1810	395	253	226	162	591	2150	131
29	133	169	144	265	---	377	227	215	148	1120	1250	126
30	128	214	150	267	---	362	214	222	224	1320	914	122
31	136	---	151	464	---	335	---	218	---	855	3340	---
TOTAL	4417	4285	8389	22569	106156	15366	10749	23726	28701	12698	84514	7895
MEAN	142	143	271	728	3791	496	358	765	957	410	2726	263
MAX	230	214	1180	5140	24200	1110	1650	6490	10000	1320	29600	1200
MIN	120	119	144	150	552	306	214	195	148	123	133	122
CFSM	.10	.10	.20	.53	2.76	.36	.26	.56	.70	.30	1.99	.19
IN.	.12	.12	.23	.61	2.88	.42	.29	.64	.78	.34	2.29	.21

CAL YR 1984	TOTAL	700625	MEAN	1914	MAX	41300	MIN	100	CFSM 1.40	IN.	19.00
WTR YR 1985	TOTAL	329465	MEAN	903	MAX	29600	MIN	119	CFSM .66	IN.	8.93

e Estimated

02126000 ROCKY RIVER NEAR NORWOOD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/23	1240	WATER	0	.93	206	273	7.00	22.0	3.4	7.0	190
84/11/28	1135	WATER	0	.73	145	206	8.10	11.0	2.0	11.6	10
84/12/10	1300	WATER	0	1.00	231	110	7.30	5.0	33.0	12.2	1600
85/01/31	1220	WATER	0	1.37	382	153	7.50	4.0		12.3	110
85/02/21	1235	WATER	0	2.00	730	151	6.70	8.0	18.0	12.2	40
85/03/20	1230	WATER	0	1.21	311	189	8.10	12.0		11.3	10
85/04/25	1130	WATER	0	1.04	246	165	7.20	23.0		9.0	10
85/05/23	1215	WATER	0	1.38	386	187	7.20	23.0	15.0	8.0	20
85/06/19	1205	WATER	0	1.14	284	165	7.00	27.0		7.6	10K
85/07/25	1200	WATER	0	2.15	832	140	6.70	24.0		7.4	1800
85/08/22	1150	WATER	0.1	8.39	8440	108	6.40	22.0	180.0	7.8	76000
85/09/23	1140	WATER	0.1	.73	145	372	7.50	21.0		7.8	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/23	1240	WATER	0	74	6	340	.80	.030	.700	1.100	1.000
84/11/28	1135	WATER	0	82	2	340	.82	.020	1.700	1.000	.900
84/12/10	1300	WATER	0	41	17	200	1.20	.220	.700	.430	.320
85/01/31	1220	WATER	0	52	3	190	1.30	.310	.600	.510	.430
85/02/21	1235	WATER	0	28	7	190	1.40	.260	.400	.270	.190
85/03/20	1230	WATER	0	46	1	160	.45	.020	.300	.360	.300
85/04/25	1130	WATER	0	40	8	170	.94	.070	.500	.500	.430
85/05/23	1215	WATER	0	32	11	190	1.80	.060	.400	.370	.310
85/06/19	1205	WATER	0	32	23	180	1.30	.050	.300	.320	.260
85/07/25	1200	WATER	0	46	81	350	1.80	.220	.700	.570	.430
85/08/22	1150	WATER	0.1	25	480	590	.69	.080	1.400	.710	.110
85/09/23	1140	WATER	0.1	83	1K	340	.84	.140	.500	.700	.670

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/28	1135	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/02/21	1235	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/23	1215	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/22	1150	WATER	0.1	10K	20K	50K	30	100K	.2K	100K	90

K Less than noted value.

PEE DEE RIVER BASIN

02128000 LITTLE RIVER NEAR STAR, NC

LOCATION.--Lat 35°23'11", long 79°49'56", Montgomery County, Hydrologic Unit 03040104, on left bank 9 ft downstream from bridge on Secondary Road 1340, 50 ft upstream from Black Rock Branch, 0.2 mi upstream from Norfolk Southern Railway bridge, 0.3 mi downstream from West Fork Little River, and 3 mi west of Star.

DRAINAGE AREA.--106 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-54. April 1954 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 409.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge. Records good except those below 30 ft³/s, which are fair.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--31 years, 112 ft³/s, 14.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s Oct. 15, 1954, gage height, 16.46 ft; minimum, 0.24 ft³/s Oct. 4, 5, 1968, gage height, 0.68 ft, may be affected by upstream storage releases for water supply.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1945 reached a stage of about 20 ft, from information by by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	1200	2,870	8.22	Aug. 18	0300	*5,080	*11.09
Feb. 2	1000	3,120	8.60	Aug. 21	0830	2,950	8.34

Minimum discharge, 10 ft³/s Oct. 12, gage height, 1.40 ft; minimum daily, 11 ft³/s Oct. 11-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	13	22	25	1760	101	62	38	39	72	89	154
2	45	13	18	52	2140	93	59	39	36	81	336	78
3	21	12	145	853	479	84	57	311	34	37	96	63
4	16	12	90	1010	205	78	57	166	33	25	46	54
5	14	12	83	451	168	78	56	80	40	26	34	47
6	12	12	293	145	326	73	61	60	48	24	31	43
7	12	12	92	94	304	68	58	53	160	33	28	40
8	12	12	47	74	165	67	54	49	684	61	52	37
9	12	12	36	61	122	69	51	47	134	34	58	36
10	12	12	32	54	104	68	50	50	75	25	33	35
11	11	16	31	51	96	65	51	65	56	22	28	34
12	11	21	29	49	589	66	52	71	49	20	24	33
13	11	20	28	46	284	63	52	57	47	23	22	31
14	11	17	27	45	135	61	52	49	49	107	22	28
15	12	15	26	45	121	60	55	44	42	67	22	27
16	12	13	26	43	104	57	71	453	134	34	21	27
17	12	13	26	47	93	58	147	251	85	24	452	27
18	12	12	25	64	86	58	73	137	64	20	2120	26
19	12	14	25	62	81	55	59	80	46	18	248	26
20	13	15	26	52	85	54	53	62	60	17	99	25
21	13	13	26	53	80	55	50	56	35	17	931	25
22	15	12	27	42	75	80	46	91	30	21	458	26
23	26	12	27	41	73	276	44	84	26	20	133	26
24	18	12	27	42	73	145	45	69	25	18	79	24
25	16	13	27	45	74	114	61	57	22	282	971	24
26	14	14	25	44	338	91	53	50	24	311	258	23
27	13	14	24	40	219	75	46	45	21	168	157	22
28	12	24	24	44	127	72	44	41	19	117	110	20
29	12	58	25	46	---	71	43	40	17	61	73	19
30	12	37	25	48	---	68	40	39	21	47	64	19
31	13	---	25	132	---	65	---	41	---	45	634	---
TOTAL	487	487	1409	3900	8526	2488	1702	2775	2155	1877	7729	1099
MEAN	15.7	16.2	45.5	126	305	80.3	56.7	89.5	71.8	60.5	249	36.6
MAX	50	58	293	1010	2140	276	147	453	684	311	2120	154
MIN	11	12	18	25	73	54	40	38	17	17	21	19
CFSM	.15	.15	.43	1.19	2.88	.76	.53	.84	.68	.57	2.35	.35
IN.	.17	.17	.49	1.37	2.99	.87	.60	.97	.76	.66	2.71	.39

CAL YR 1984 TOTAL 58299.9 MEAN 159 MAX 3420 MIN 7.3 CFSM 1.50 IN. 20.46
WTR YR 1985 TOTAL 34634 MEAN 94.9 MAX 2140 MIN 11 CFSM .90 IN. 12.15

02128000 LITTLE RIVER NEAR STAR, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/24	1240	WATER	0	1.45	14	94	7.09	23.0		6.8	40
84/11/29	1325	WATER	0	1.80	56	62	6.48	10.0		10.8	460
84/12/31	1310	WATER	0	1.53	25	63	6.74	14.0	2.6	10.5	
85/01/24	1500	WATER	0	1.63	31	58	6.60	3.0		13.4	20
85/02/07	1140	WATER	0	2.87	327	68	6.65	7.0		12.2	770
85/03/12	1105	WATER	0	1.81	67	60	7.22	13.0	3.7	10.6	40
85/04/10	1200	WATER	0	1.72	50	57	7.49	12.0		10.4	60
85/05/09	1020	WATER	0	1.68	44	57	7.33	18.0		9.0	160
85/06/19	1010	WATER	0	1.72	49	62	7.20	23.0	16.0	7.0	130
85/07/24	0955	WATER	0	1.51	7	61	7.09	23.0		7.0	100
85/08/20	0950	WATER	0.15	2.02	98	41	6.85	24.0		7.8	190
85/09/18	0950	WATER	0.1	1.62	27	47	7.15	16.0	4.0	8.8	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/24	1240	WATER	0	21	2	68					
84/11/29	1325	WATER	0	15	4	67					
84/12/31	1310	WATER	0	13	1	76	.01K	.010K	.200	.040	.010K
85/01/24	1500	WATER	0	29	3	71					
85/02/07	1140	WATER	0	15	11	96					
85/03/12	1105	WATER	0	23	1	52	.01K	.010	.200	.020	.010
85/04/10	1200	WATER	0	26	3	110					
85/05/09	1020	WATER	0	23	7	79					
85/06/19	1010	WATER	0	26	17	100	.63	.330	.600	.140	.070
85/07/24	0955	WATER	0	25	23	130					
85/08/20	0950	WATER	0.15	20	23	120					
85/09/18	0950	WATER	0.1	29	1	75	.12	.010	.100	.040	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/31	1310	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/12	1105	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/19	1010	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/18	0950	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC
(National stream-quality accounting network station)

LOCATION.--Lat 34°56'46", long 79°52'11", Richmond County, Hydrologic Unit 03040201, on left bank at bridge on U.S. Highway 74, 2.5 mi upstream from Falling Creek, 3.3 mi downstream from Blewett Falls hydroelectric plant, 6 mi west of Rockingham, and 192 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,863 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1906 to January 1912, October 1927 to current year. Published as Yadkin River near Pee Dee, N.C., August 1906 to January 1912.

REVISED RECORDS.--WSP 1203: 1928-37. WSP 1303: 1928-42 (monthly and yearly runoff), 1943-46 (adjusted monthly runoff). WSP 1503: 1906-12, 1928-32(m). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 120.68 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers). August 1906 to January 1912 nonrecording gage at site 3.3 mi upstream at different datum. September 1927 to Sept. 30, 1931, water-stage recorder at present site at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1928 by Blewett Falls Lake and five other reservoirs upstream (see p. 449).

AVERAGE DISCHARGE.--63 years (1906-11, 1927-85), 8,049 ft³/s, 15.93 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 276,000 ft³/s Aug. 27, 1908, gage height, 31.28 ft, present site and datum, from records of State Highway Commission; minimum, 50 ft³/s Dec. 2, 3, 1951; minimum daily, 58 ft³/s Dec. 2, 1951, result of abnormally low shutdown of Blewett Falls hydroelectric plant to produce steady flow for current-meter measurements at this gaging station; minimum discharge from normal regulations, 96 ft³/s Oct. 25, 1943; minimum daily, 120 ft³/s Oct. 8, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 76,900 ft³/s Aug. 18, gage height, 12.81 ft; minimum, 136 ft³/s Sept. 30, gage height, 0.53 ft; minimum daily, 146 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3210	4140	4420	411	9200	11700	3800	914	2020	3620	6270	14100
2	3880	5360	506	4310	41600	9800	5420	2520	1420	4290	6440	11700
3	4150	1170	4110	5800	44900	9510	2110	3730	5240	5600	881	9720
4	3960	521	5170	12000	23800	7460	3900	2640	3800	491	2210	6730
5	4040	3210	6100	20200	16000	5480	2760	2690	3260	4120	3730	2350
6	2180	3750	9730	15100	21400	6190	1380	3050	2800	513	3190	750
7	319	5370	9130	11600	22100	7880	315	2970	1890	570	3000	274
8	3190	5400	6730	10700	17500	4330	5020	471	14500	3380	4200	231
9	5440	5350	4440	9360	13700	1110	4090	4020	20900	3440	4210	2710
10	2390	2240	6690	7020	13300	1820	1970	3220	12100	3220	622	3080
11	2990	1380	6720	7470	12000	4730	4070	356	4710	2090	1460	3790
12	3390	2460	4130	952	15900	5170	3200	945	1610	2980	3650	4700
13	420	3350	3960	357	17900	4410	365	4490	3520	412	3400	1880
14	299	3540	4820	5190	16000	2970	345	4970	4180	801	3410	4570
15	2730	3190	2010	6010	13200	3510	4860	2260	440	3910	3220	397
16	5210	3240	2680	4430	12200	375	3920	5690	1850	3130	2540	278
17	2880	1030	3720	4580	10900	1200	5210	10100	4640	2890	715	3300
18	3240	281	3490	3730	10900	5260	5120	14100	6230	3230	61300	4710
19	4190	3300	2630	1640	10200	7970	3620	11700	4120	3520	43400	7600
20	508	3830	4390	852	9540	4700	385	6860	3560	507	18900	4000
21	439	5910	5310	7900	9050	4950	347	1820	2200	781	13500	482
22	3230	2140	662	4240	5500	4570	5100	1950	446	3570	35900	207
23	3790	1910	1600	4330	3570	1210	4560	3730	368	2560	21800	4560
24	4160	497	4100	1190	2860	806	2180	5050	3520	4030	14400	7150
25	6140	306	346	2500	5490	5090	299	6230	4010	10700	21600	4820
26	3310	3930	4330	931	8910	5720	4340	7820	3560	8440	25600	7250
27	497	5230	1640	2060	9980	3620	1090	5290	2980	552	22000	6740
28	463	6680	273	2340	11100	4340	2300	2530	2730	4740	16600	213
29	3290	5890	334	2760	---	4510	4720	1680	447	5780	12700	150
30	5250	3980	404	1680	---	479	2060	3100	2270	6940	12700	146
31	3380	---	2950	6180	---	1010	---	4350	---	9050	13300	---
TOTAL	92565	98585	117525	167823	408700	141880	89056	131246	125321	109857	386848	118588
MEAN	2986	3286	3791	5414	14600	4577	2969	4234	4177	3544	12480	3953
MAX	6140	6680	9730	20200	44900	11700	5420	14100	20900	10700	61300	14100
MIN	299	281	273	357	2860	375	299	356	368	412	622	146
(†)	-530	-698	-402	-104	+1494	+8	+405	+634	+95	-21	+307	-1419

CAL YR 1984 TOTAL 3899441 MEAN 10650 MAX 67100 MIN 273 MEAN‡ 10475 CFSM‡ 1.53 IN.‡ 20.78
WTR YR 1985 TOTAL 1987994 MEAN 5447 MAX 61300 MIN 146 MEAN‡ 5420 CFSM‡ 0.79 IN.‡ 10.72

† Change in contents, equivalent in cubic feet per second, in W. Kerr Scott Reservoir, provided by U. S. Army Corps of Engineers; High Rock Lake, Tuckertown Reservoir, and Badin Lake, provided by Yadkin Inc.; and Lake Tillery and Blewett Falls Lake, provided by Carolina Power and Light Co.

‡ Adjusted for change in contents.

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-48, 1958 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1967, July to September 1973, March 1974 to September 1984.
WATER TEMPERATURE: October 1946 to September 1948, October 1957 to September 1967, July to September 1973, March 1974 to September 1984.

INSTRUMENTATION.--Water-quality monitor November 1981 to September 1984.

REMARKS.--Station operated as part of NASQAN network from October 1974 to present. Miscellaneous chemical data published for water years 1945, 1955-56. Daily records of specific conductance for water years 1958-64 are available in files of district office in Raleigh, NC. Flow regulated by Blewett Falls Lake and five other reservoirs upstream.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1965-67, 1974-84): Maximum, 151 microsiemens, Jan. 30, 1982; minimum daily, 48 microsiemens, July 15, 1975, Feb. 25, 1979.
WATER TEMPERATURE (water years 1958-67, 1974-84): Maximum daily, 33.0°C, July 11, 1977; minimum daily, 0.0°C on many days in 1961-62.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV 19...	1100	5120	97	7.2	15.0	7.1	751	9.2	93	<1	<1	21
APR 02...	1100	8000	97	7.2	13.5	15	758	9.8	95	<1	<1	23
MAY 14...	1030	7200	110	6.8	20.5	13	755	8.2	92	3	910	23
SEP 17...	1100	300	78	6.8	22.0	10	763	9.3	106	--	--	23

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
NOV 19...	0	4.8	2.1	10	47	1	2.7	8.1	8.0	.10	11	68
APR 02...	0	5.4	2.2	7.8	40	.7	1.9	9.2	8.2	.20	9.9	66
MAY 14...	0	5.1	2.5	10	45	.9	2.4	10	9.1	<.10	9.4	65
SEP 17...	0	5.4	2.3	7.6	38	.7	3.5	8.2	8.4	.10	8.6	66

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
NOV 19...	63	.09	940	.31	.090	.12	.60	.020	<.010	.050	.15
APR 02...	59	.09	1430	.55	<.010	--	.60	.090	.040	<.010	--
MAY 14...	64	.09	1260	.27	.090	.12	.40	.070	.030	.030	.09
SEP 17...	60	.09	53	.39	.190	.24	.40	.070	.060	.020	.06

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
NOV 19...	30	<1	17	<.0	<1	1	<3	1	63	3	<4
APR 02...	--	1	21	<.5	<1	<1	<3	2	190	<1	<4
MAY 14...	50	<1	21	<.5	<1	<1	<3	6	120	1	<4
SEP 17...	110	<1	21	<.5	<1	3	<3	5	160	1	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 19...	22	<.1	<10	1	<1	<1	48	<6	<3	--	--	--
APR 02...	57	.2	<10	1	<1	--	48	<6	5	21	454	91
MAY 14...	42	.2	<10	6	<1	<1	52	<6	7	--	--	--
SEP 17...	60	<.1	<10	1	<1	<1	48	<6	7	10	8.1	86

02129000 PEE DEE RIVER NEAR ROCKINGHAM, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/23	1410	WATER	0	3.27	5280	106	6.54	22.0	7.9	7.6	20
84/11/26	1410	WATER	0	3.43	5920	86	6.84	14.0	6.7	9.6	10
84/12/27	1410	WATER	0	2.48	2450	102	7.03	15.0	3.3	10.8	10K
85/01/23	1250	WATER	0	3.93	8150	97	7.00	6.0		12.0	20
85/02/11	1135	WATER	0	4.68	11900	70	7.30	5.0		12.0	70
85/03/18	1430	WATER	0	3.90	8000	88	7.26	12.0	21.0	8.4	10K
85/04/17	1115	WATER	0	3.92	8100	97	7.33	18.0		9.4	30
85/05/15	1015	WATER	0	1.12	352	99	7.14	23.0		7.2	10
85/06/11	1310	WATER	0	3.76	7300	92	6.81	25.0	60.0	5.8	80
85/07/30	1020	WATER	0	3.96	8300	80	6.75	26.0		5.2	10
85/08/19	1345	WATER	0.15	8.07	34300	56	6.17	25.0		7.0	900
85/09/12	1045	WATER	0.1	1.90	1120	92	6.71	26.0	7.1	4.6	10

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/23	1410	WATER	0	17	12	97	.29	.080	.300	.050	.010
84/11/26	1410	WATER	0	22	9	130	.35	.040	.200	.050	.030
84/12/27	1410	WATER	0	15	4	89	.48	.030	.500	.040	.020
85/01/23	1250	WATER	0	30	9	83					
85/02/11	1135	WATER	0	18	24	97					
85/03/18	1430	WATER	0	24	20	120	.80	.040	.300	.110	.030
85/04/17	1115	WATER	0	25	7	180					
85/05/15	1015	WATER	0	26	1	90					
85/06/11	1310	WATER	0	22	31	140	.95	.150	.500	.150	.050
85/07/30	1020	WATER	0	22	3	110					
85/08/19	1345	WATER	0.15	15	74	290					
85/09/12	1045	WATER	0.1	25	7	87	.43	.110	.400	.070	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/27	1410	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/18	1430	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/11	1310	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/12	1045	WATER	0.1	10K	20K	50K	20K	100K	7.3	100K	20K

K Less than noted value.

02132287950 JORDAN CREEK NEAR SILVER HILL, NC
(National acid precipitation assessment program)

LOCATION.--Lat 34°58'12", long 79°31'34", Scotland County, Hydrologic Unit 03040204, on right bank 8 ft upstream from culvert on Gardner Farm Road Extension in State Sandhills Game Management Area, 0.15 mi west of Secondary Road 1328, 3.5 mi east of Marston, 4.9 mi south of Hoffman, and 6.0 mi southwest of Silver Hill.

DRAINAGE AREA.--0.36 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1983 to current year.

GAGE.--Water-stage recorder. V-notch sharp-crested weir since Nov. 8, 1984. Datum of gage is 385 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and those for period Oct. 1 to Nov. 8, which are poor. Diurnal fluctuation at low flows in the growing season.

EXTREMES FOR PERIOD OF RECORD.--Maximum known discharge, 3.9 ft^3/s, July 25, 1985; maximum gage height, 2.70 ft, July 17, 1984; minimum 0.12 ft^3/s June 25, 26, 27, July 10, 12, 19, 20, 21, 22, 1985; minimum daily, 0.14 ft^3/s June 26-28, July 21, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1.3 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 22	1715	1.7	1.56	July 25	0945	*3.9	*1.80

Minimum discharge, 0.12 ft^3/s June 25, 26, 27, July 10, 12, 19, 20, 21, 22; minimum daily, 0.14 ft^3/s June 26-28, July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	.43	.32	.27	.35	.27	.23	.19	e.19	.22	.33	.33
2	.45	.41	.34	.27	.61	.27	.23	.19	e.19	.19	.32	.32
3	.41	.38	.41	.58	.32	.26	.23	.37	e.19	.17	.29	.31
4	e.38	.38	.34	.48	.29	.26	.22	.21	e.19	.18	.27	.31
5	e.36	.37	.50	.33	.43	.27	.22	.20	.37	.20	.26	.31
6	e.34	.37	.38	.30	.56	.25	.23	.19	.56	.18	.27	.30
7	e.32	e.37	.33	.29	.34	.25	.22	.18	.29	.19	.27	.30
8	e.31	e.37	.32	.29	.32	.25	.22	.19	.33	.16	.36	.30
9	e.29	.37	.32	.27	.32	.25	.22	.20	.20	.15	.32	.30
10	e.28	.37	.32	.27	.30	.25	.22	.20	.18	.15	.27	.30
11	.27	.47	.32	.27	.32	.25	.22	.20	.19	.16	.26	.29
12	.28	.37	.32	.27	.54	.25	.22	.19	.21	.15	.25	.30
13	.27	.36	.31	.27	.32	.25	.22	.19	.21	.15	.24	.30
14	.26	.35	.29	.27	.32	.25	.23	.18	.20	.20	.24	.29
15	.25	.34	.29	.27	.29	.24	.23	.17	.21	.16	.24	.29
16	.28	.35	.29	.27	.29	.24	.23	.35	.44	.18	.34	.29
17	.28	.34	.29	.36	.29	.26	.22	.27	.25	.19	.61	.29
18	.30	.34	.29	.28	.29	.24	.21	.21	.22	.16	.64	.28
19	.30	.34	.29	.27	.28	.24	.21	.18	.23	.15	.35	.28
20	.29	.34	.29	.27	.34	.24	.20	.18	.21	.15	.31	.28
21	.32	.34	.29	.25	.29	.24	.20	.18	.17	.14	.57	.29
22	.36	.34	.29	.26	.27	.40	.20	.18	.16	.49	.40	.30
23	.36	.34	.29	.26	.27	.28	.20	e.20	.16	.53	.32	.29
24	.34	.34	.29	.26	.27	.25	.20	e.20	.15	.37	.37	.30
25	.32	.33	.28	.26	.27	.26	.20	e.20	.15	1.2	.54	.30
26	.32	.32	.27	.25	.27	.24	.19	e.20	.14	.37	.39	.30
27	.32	.33	.27	.25	.27	.24	.19	e.20	.14	.40	.36	.29
28	.63	.44	.27	.26	.27	.24	.19	e.19	.14	.43	.33	.27
29	.50	.35	.27	.26	---	.24	.19	e.19	.15	.60	.32	.27
30	e.46	.33	.27	.25	---	.23	.19	e.19	.30	.36	.41	.28
31	.43	---	.27	.42	---	.23	---	e.19	---	.43	.40	---
TOTAL	10.93	10.88	9.62	9.13	9.30	7.89	6.38	6.36	6.72	8.76	10.85	8.86
MEAN	.35	.36	.31	.29	.33	.25	.21	.21	.22	.28	.35	.30
MAX	.65	.47	.50	.58	.61	.40	.23	.37	.56	1.2	.64	.33
MIN	.25	.32	.27	.25	.27	.23	.19	.17	.14	.14	.24	.27
CFSM	.97	1.00	.86	.81	.92	.69	.58	.58	.61	.78	.97	.83
IN.	1.13	1.12	.99	.94	.96	.82	.66	.66	.69	.91	1.12	.92

CAL YR 1984	TOTAL	151.24	MEAN	.41	MAX	2.1	MIN	.24	CFSM	1.14	IN.	15.63
WTR YR 1985	TOTAL	105.68	MEAN	.29	MAX	1.2	MIN	.14	CFSM	.81	IN.	10.92

e Estimated

0213228795 JORDAN CREEK NEAR SILVER HILL, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to current year.
pH: October 1983 to current year.
WATER TEMPERATURE: October 1983 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1983.

REMARKS.--Station operated as the continuous record index station in the National Acid Precipitation Assessment Program for defining effects of atmospheric deposition on surface-water chemistry. Precipitation monitoring station, which is part of the National Atmospheric Deposition Program/National Trends Network, is co-located with this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 55 microsiemens, Dec. 6, 1983; minimum recorded, 9 microsiemens, Jan. 22, Mar. 6, 7, 8, 10, 11, 1985.
pH: Maximum recorded, 5.0 units Dec 1, 2, 3, 1983, Apr. 17, 18, May 14, 15, 16, 1984, Mar. 6, 7, 10, 11, 13, 19, 1985; minimum recorded, 3.6 units Nov. 16, 17, 18, 20, 1983.
WATER TEMPERATURE: Maximum, 22.0°C, July 22, 25, Aug. 17, 18, 1985; minimum, 9.0°C, Jan. 21, 22, 23, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 42 microsiemens, July 25; minimum recorded, 9 microsiemens, Jan. 22, Mar. 6, 7, 8, 10, 11.
pH: Maximum recorded, 5.0 units Mar. 6, 7, 10, 11, 13, 19; minimum recorded, 3.8 units July 25.
WATER TEMPERATURE: Maximum, 22.0°C, July 22, 25, Aug. 17, 18; minimum, 9.0°C, Jan. 21, 22, 23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM DIS-SOLVED (UG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)
OCT , 1984												
30...	0835	.44	15	4.6	18.5	0	5.0	.10	.12	.80	80	<1.0
DEC												
18...	1030	.30	14	4.5	14.5	0	--	.10	.13	.80	70	<1.0
FEB , 1985												
20...	1400	.35	15	4.6	11.5	0	--	.10	.10	.80	120	<1.0
APR												
23...	1345	.17	11	4.7	16.5	0	--	.07	.10	.77	90	--
23...	1355	.17	11	4.7	16.5	0	--	.10	.10	.79	90	--
MAY												
30...	1030	.27	14	4.8	16.5	0	--	.10	.14	.85	80	--
30...	1035	.27	14	4.8	16.5	0	--	.08	.14	.82	80	--
JUL												
02...	1330	.19	13	4.5	19.0	--	--	<.01	.13	.84	80	--
02...	1335	.20	13	4.5	19.0	--	--	<.01	.13	.85	90	--
25...	1200	2.2	43	3.8	22.0	3	--	.44	.37	.82	310	--
SEP												
04...	1330	.30	14	4.6	21.5	0	1.3	.07	.13	.77	50	<.500
04...	1400	.30	14	4.6	21.5	0	1.5	.08	.13	.77	50	<.500

0213228795 JORDAN CREEK NEAR SILVER HILL, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN NITRATE DISSOLV (UG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	IRON, DIS- SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT , 1984											
30...	.6	1.4	<.01	4.2	<10.0	.008	<.002	60	4	38	4.3
DEC											
18...	.7	1.3	<.01	4.1	<10.0	.014	.002	50	<1	23	1.4
FEB , 1985											
20...	1.0	1.2	<.01	3.9	<10.0	.039	<.001	50	3	27	2.8
APR											
23...	.5	1.3	<.01	--	<10.0	.009	<.010	--	--	--	2.5
23...	.5	1.4	<.01	--	<10.0	.007	<.010	--	--	--	2.2
MAY											
30...	.5	1.4	.02	3.7	<10.0	.011	<.010	50	<1	20	2.0
30...	.5	1.4	.03	3.8	10.0	.016	<.010	50	1	20	1.8
JUL											
02...	.8	1.4	<.01	4.1	<10.0	.014	<.010	70	3	45	3.0
02...	.6	1.4	.02	4.1	<10.0	.011	<.010	70	3	34	4.0
25...	2.3	.92	.05	3.2	11.0	.039	<.010	350	21	140	27
SEP											
04...	.6	1.4	.02	4.2	<10.0	.015	<.001	70	1	44	3.1
04...	.6	1.4	.02	4.2	<10.0	.008	<.001	70	2	43	3.8

0213228795 JORDAN CREEK NEAR SILVER HILL, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18	14	15	16	14	15	15	12	14	17	12	13
2	15	14	15	15	15	15	16	11	13	13	13	13
3	16	14	15	16	14	15	18	15	17	17	13	14
4	16	14	15	16	15	15	16	14	15	26	12	19
5	16	15	15	16	14	16	25	14	19	19	11	16
6	16	15	16	16	14	15	22	15	19	17	11	13
7	16	14	15	16	14	15	17	12	14	16	10	14
8	16	14	14	---	---	---	17	13	15	16	11	13
9	16	15	15	---	---	---	17	14	15	15	11	14
10	16	15	15	---	---	---	16	15	16	14	12	14
11	15	15	15	---	---	---	16	15	16	15	13	14
12	15	15	15	16	14	15	16	14	15	14	12	13
13	15	15	15	15	15	15	16	14	15	14	11	13
14	16	14	15	14	12	13	15	14	15	14	11	13
15	16	15	15	14	11	13	15	14	15	14	11	13
16	15	15	15	14	12	14	15	13	14	14	11	12
17	15	15	15	14	11	12	15	14	14	16	12	15
18	15	15	15	14	11	13	15	13	14	15	14	14
19	15	15	15	14	13	14	15	13	14	15	12	14
20	15	15	15	14	11	12	15	14	14	13	10	12
21	18	15	15	13	11	12	14	13	14	13	10	11
22	19	14	16	14	12	13	14	11	13	13	9	11
23	18	14	15	14	13	13	13	10	11	13	10	12
24	15	15	15	14	11	13	14	10	12	13	11	12
25	15	15	15	14	12	13	14	10	13	13	12	13
26	15	15	15	14	11	13	13	10	12	13	12	13
27	15	15	15	14	13	14	14	12	13	13	11	12
28	39	15	24	21	14	16	14	11	13	13	13	13
29	31	14	18	16	13	14	14	13	13	13	12	13
30	15	14	15	15	12	14	14	11	13	13	11	13
31	15	14	14	---	---	---	13	12	13	22	13	18
MONTH	39	14	15	21	11	14	25	10	14	26	9	13

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	19	16	17	13	10	12	12	11	12	11	10	11
2	28	19	25	13	11	12	11	10	11	12	11	12
3	21	17	19	13	10	11	11	10	11	17	11	13
4	17	15	16	13	12	13	11	11	11	13	11	13
5	23	12	17	13	10	13	12	11	11	12	11	12
6	26	19	22	12	9	10	12	11	11	12	11	12
7	19	16	18	13	9	11	11	11	11	12	11	12
8	16	13	15	13	9	12	11	10	11	12	12	12
9	16	12	14	13	10	13	11	10	11	12	11	11
10	16	12	14	13	9	10	10	10	10	12	12	12
11	17	14	15	13	9	12	11	10	10	12	12	12
12	25	17	20	13	10	13	11	10	11	13	12	13
13	17	16	16	12	10	11	12	11	11	13	12	12
14	16	15	15	12	11	11	12	11	11	13	12	12
15	15	13	15	12	10	11	12	12	12	13	12	12
16	15	11	13	11	10	10	12	12	12	15	12	14
17	14	13	14	12	11	12	12	11	11	14	13	13
18	14	13	14	11	10	10	11	11	11	13	13	13
19	14	13	14	12	10	10	11	11	11	13	13	13
20	15	13	14	11	10	11	11	11	11	13	12	13
21	15	12	14	12	10	11	11	11	11	13	13	13
22	14	13	14	14	11	13	11	10	11	13	13	13
23	14	14	14	14	13	13	11	11	11	---	---	---
24	14	14	14	14	13	13	11	10	11	---	---	---
25	14	14	14	13	12	13	11	11	11	---	---	---
26	14	14	14	13	12	12	11	10	11	---	---	---
27	14	13	14	13	12	12	11	10	11	---	---	---
28	13	10	12	13	12	13	11	11	11	---	---	---
29	---	---	---	13	12	13	11	11	11	---	---	---
30	---	---	---	13	13	13	11	10	11	---	---	---
31	---	---	---	13	12	12	---	---	---	---	---	---
MONTH	28	10	16	14	9	12	12	10	11	17	10	12

0213228795 JORDAN CREEK NEAR SILVER HILL, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1				---	---	---	19	17	18	16	14	15
2				---	---	---	18	16	17	15	14	15
3				13	12	13	17	15	16	15	13	14
4				13	12	12	16	14	15	14	14	14
5				13	12	13	15	14	14	15	14	14
6				12	12	12	14	13	14	14	13	14
7				13	12	12	14	13	13	15	13	14
8				12	12	12	15	13	14	14	13	14
9				12	12	12	15	14	15	14	13	14
10				16	12	12	15	14	14	14	13	14
11				12	12	12	14	13	14	14	13	14
12				12	12	12	14	13	14	14	13	14
13				12	11	12	14	13	13	14	13	13
14				13	11	12	14	13	13	14	13	13
15				12	12	12	13	12	13	14	13	13
16				13	12	12	27	12	14	13	13	13
17				14	12	13	31	19	23	13	12	13
18				12	12	12	34	21	25	13	12	13
19				12	12	12	21	17	19	13	12	12
20				12	12	12	17	16	17	13	12	12
21				12	12	12	25	16	21	13	12	12
22				37	11	18	24	18	20	13	12	12
23				33	21	27	18	16	17	13	12	13
24				26	19	22	22	14	16	12	12	12
25				42	23	32	23	19	21	13	12	12
26				28	21	24	19	17	18	13	12	12
27				24	18	21	17	16	16	12	12	12
28				23	18	21	16	15	16	12	12	12
29				29	21	25	15	14	15	13	12	12
30				23	19	21	20	14	16	13	12	12
31				22	18	20	20	16	17	---	---	---
MONTH				42	11	16	34	12	16	16	12	13
YEAR	42	9	14									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.6	4.4	4.5	4.4	4.6	4.5	4.6	4.4	4.6	4.5	4.9	4.7
2	4.5	4.5	4.6	4.5	4.7	4.5	4.6	4.4	4.5	4.5	4.9	4.7
3	4.6	4.0	4.5	4.4	4.5	4.5	4.6	4.1	4.5	4.5	4.9	4.8
4	4.6	4.5	4.5	4.4	4.6	4.5	4.5	4.5	4.5	4.5	4.8	4.7
5	4.6	4.5	4.5	4.4	4.6	4.4	4.5	4.4	4.6	4.5	4.9	4.7
6	4.6	4.5	4.6	4.4	4.5	4.4	4.5	4.5	4.6	4.5	5.0	4.8
7	4.8	4.5	4.6	4.4	4.6	4.5	4.6	4.4	4.6	4.5	5.0	4.8
8	4.6	4.5	4.6	4.5	4.6	4.5	4.6	4.4	4.6	4.5	4.9	4.8
9	4.6	4.5	4.6	4.5	4.6	4.5	4.6	4.4	4.8	4.6	4.9	4.8
10	4.8	4.5	4.6	4.5	4.5	4.5	4.6	4.4	4.8	4.6	5.0	4.8
11	4.6	4.5	4.6	4.5	4.5	4.5	4.5	4.4	4.9	4.8	5.0	4.8
12	4.5	4.5	4.5	4.5	4.6	4.5	4.5	4.4	4.9	4.8	4.9	4.8
13	4.5	4.5	4.5	4.4	4.6	4.5	4.6	4.4	4.9	4.8	5.0	4.7
14	4.5	4.5	4.7	4.4	4.5	4.5	4.5	4.4	4.9	4.8	4.9	4.8
15	4.5	4.5	4.7	4.5	4.6	4.5	4.6	4.4	4.8	4.6	4.9	4.8
16	4.6	4.5	4.6	4.5	4.6	4.5	4.6	4.4	4.8	4.6	4.9	4.8
17	4.6	4.5	4.7	4.5	4.6	4.5	4.5	4.4	4.8	4.5	4.9	4.7
18	4.6	4.5	4.7	4.6	4.6	4.2	4.5	4.4	4.9	4.4	4.9	4.8
19	4.8	4.5	4.6	4.5	4.5	4.2	4.5	4.5	4.6	4.4	5.0	4.8
20	4.8	4.8	4.7	4.6	4.6	4.4	4.5	4.5	4.7	4.5	4.9	4.8
21	4.8	4.6	4.7	4.6	4.6	4.2	4.6	4.4	4.8	4.7	4.9	4.7
22	4.9	4.8	4.7	4.6	4.6	4.4	4.5	4.5	4.8	4.7	4.9	4.7
23	4.9	4.8	4.6	4.5	4.6	4.4	4.5	4.0	4.8	4.7	4.7	4.7
24	4.9	4.8	4.7	4.5	4.6	4.4	4.6	4.5	4.8	4.7	4.8	4.7
25	4.8	4.6	4.6	4.5	4.6	4.4	4.6	4.5	4.7	4.7	4.8	4.7
26	4.8	4.5	4.6	4.6	4.6	4.2	4.6	4.5	4.8	4.7	4.9	4.7
27	4.8	4.5	4.6	4.6	4.6	4.4	4.8	4.5	4.8	4.7	4.9	4.7
28	4.9	4.4	4.6	4.5	4.6	4.4	4.6	4.5	4.9	4.8	4.8	4.7
29	4.6	4.4	4.6	4.5	4.6	4.4	4.6	4.5	---	---	4.8	4.7
30	4.6	4.4	4.6	4.5	4.6	4.4	4.8	4.5	---	---	4.8	4.7
31	4.6	4.4	---	---	4.6	4.4	4.6	4.5	---	---	4.8	4.8
MONTH	4.9	4.0	4.7	4.4	4.7	4.2	4.8	4.0	4.9	4.4	5.0	4.7

0213228795 JORDAN CREEK NEAR SILVER HILL, NC--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.9	4.7	4.7	4.5			---	---	4.1	4.1	4.5	4.5
2	4.9	4.8	4.5	4.5			---	---	4.1	4.1	4.6	4.5
3	4.9	4.8	4.6	4.4			4.6	4.6	4.2	4.1	4.6	4.5
4	4.9	4.8	4.6	4.4			4.6	4.6	4.2	4.1	4.6	4.6
5	4.8	4.7	4.6	4.4			4.6	4.5	4.2	4.1	4.7	4.6
6	4.9	4.8	4.6	4.3			4.5	4.5	4.2	4.2	4.7	4.6
7	4.9	4.8	4.5	4.3			4.5	4.5	4.3	4.2	4.7	4.6
8	4.9	4.8	4.5	4.3			4.5	4.4	4.2	4.2	4.7	4.6
9	5.0	4.8	4.5	4.3			4.5	4.4	4.3	4.2	4.7	4.7
10	4.9	4.8	4.3	4.2			4.5	4.4	4.3	4.3	4.7	4.6
11	4.9	4.8	4.3	4.2			4.4	4.4	4.3	4.3	4.7	4.6
12	4.9	4.8	4.2	4.2			4.4	4.3	4.3	4.3	4.6	4.6
13	4.9	4.8	4.2	4.2			4.4	4.3	4.4	4.3	4.6	4.6
14	4.8	4.7	4.2	4.2			4.3	4.3	4.4	4.3	4.6	4.6
15	4.8	4.8	4.2	4.1			4.3	4.3	4.4	4.3	4.7	4.6
16	4.8	4.8	4.2	4.0			4.3	4.2	4.4	4.3	4.7	4.6
17	4.8	4.8	4.2	4.0			4.2	4.2	4.3	4.3	4.7	4.6
18	4.9	4.8	4.2	4.0			4.2	4.2	4.3	4.3	4.7	4.6
19	4.9	4.8	4.1	4.0			4.2	4.1	4.3	4.3	4.7	4.6
20	4.9	4.8	4.1	4.0			4.2	4.1	4.4	4.3	4.7	4.7
21	4.9	4.8	4.0	4.0			4.2	4.1	4.4	4.3	4.7	4.7
22	4.9	4.8	4.0	3.9			4.1	3.9	4.4	4.3	4.7	4.7
23	4.9	4.7	---	---			4.0	3.9	4.4	4.4	4.7	4.7
24	4.9	4.7	---	---			4.0	3.9	4.5	4.4	4.7	4.7
25	4.8	4.7	---	---			4.0	3.8	4.4	4.4	4.7	4.7
26	4.8	4.7	---	---			4.0	4.0	4.4	4.4	4.7	4.7
27	4.8	4.6	---	---			4.1	4.0	4.5	4.4	4.7	4.6
28	4.7	4.6	---	---			4.1	4.0	4.5	4.5	4.7	4.6
29	4.7	4.6	---	---			4.1	4.0	4.5	4.5	4.7	4.7
30	4.7	4.6	---	---			4.1	4.1	4.5	4.5	4.8	4.7
31	---	---	---	---			4.1	4.1	4.5	4.5	---	---
MONTH	5.0	4.6	4.7	3.9			4.6	3.8	4.5	4.1	4.8	4.5
YEAR	5.0	3.8										

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.5	17.0	17.5	18.0	17.0	17.0	14.5	13.5	14.0	16.0	15.0	15.5
2	17.5	16.5	17.0	18.0	17.0	17.5	14.5	13.0	14.0	16.0	15.5	16.0
3	17.0	16.0	17.0	17.5	16.0	17.0	14.5	14.0	14.0	16.0	14.0	14.5
4	17.5	16.5	17.0	17.5	16.0	17.0	14.0	13.5	14.0	14.0	13.5	13.5
5	17.5	16.5	17.0	17.5	16.0	17.0	14.0	13.0	13.5	13.5	13.0	13.5
6	17.5	17.0	17.5	16.0	15.0	15.5	13.5	12.5	13.5	13.5	12.0	12.5
7	17.5	17.0	17.5	15.0	14.0	14.5	12.5	12.0	12.5	13.5	12.0	12.5
8	18.0	17.5	17.5	15.0	14.0	14.5	13.0	12.0	12.5	13.0	12.0	12.5
9	18.0	17.0	17.5	15.0	14.0	14.5	13.0	12.0	12.5	12.5	12.0	12.5
10	18.0	17.0	17.5	15.0	14.0	14.5	13.5	12.5	13.0	12.0	12.0	12.0
11	18.0	17.0	17.5	15.0	14.0	14.5	14.0	13.0	13.5	12.5	12.0	12.5
12	18.0	17.0	17.5	15.0	14.0	14.5	14.0	13.0	13.5	12.0	11.5	12.0
13	17.5	16.5	17.0	15.0	14.0	14.5	14.5	13.0	14.0	12.0	11.0	11.5
14	17.5	16.5	16.5	15.5	15.0	15.0	14.5	13.5	14.0	12.0	11.0	11.5
15	17.5	16.5	16.5	15.0	13.5	14.5	15.0	14.0	14.5	12.0	10.5	11.5
16	18.0	17.0	17.5	15.5	14.5	15.0	15.0	14.0	14.5	11.5	10.5	11.0
17	18.0	17.0	17.5	15.0	14.0	14.5	15.5	14.5	15.0	12.0	11.0	11.5
18	18.0	17.0	17.0	15.0	13.5	14.5	15.5	14.5	15.0	12.0	11.5	11.5
19	18.0	17.0	17.5	16.0	15.0	15.5	15.5	14.5	15.0	12.0	11.5	11.5
20	18.0	17.0	17.5	15.0	13.5	14.5	15.5	15.0	15.5	12.0	9.5	11.0
21	17.5	17.0	17.0	14.0	13.0	13.5	16.0	15.5	15.5	10.0	9.0	9.5
22	17.5	17.0	17.5	14.0	13.5	13.5	16.0	15.0	15.5	10.5	9.0	10.0
23	17.5	17.5	17.5	14.5	13.0	13.5	15.0	14.0	14.5	10.5	9.0	10.0
24	17.5	17.0	17.5	14.0	12.5	13.5	14.5	13.5	14.0	11.0	9.5	10.0
25	18.0	17.0	17.5	14.0	12.5	13.5	15.5	14.5	15.0	11.0	10.0	10.5
26	18.0	17.0	17.5	14.5	13.0	13.5	14.5	13.5	14.0	10.5	10.0	10.5
27	18.0	17.0	17.5	15.0	14.0	14.5	15.0	14.5	14.5	11.0	9.5	10.0
28	18.0	17.0	17.5	15.5	14.5	15.0	15.0	14.0	14.5	11.0	10.5	11.0
29	18.0	17.5	17.5	14.5	13.5	14.0	15.5	14.5	15.0	11.0	10.5	11.0
30	17.5	17.5	17.5	14.5	13.0	13.5	15.5	14.5	15.0	11.0	10.5	11.0
31	17.5	17.5	17.5	---	---	---	15.5	15.0	15.5	11.5	10.5	11.0
MONTH	18.0	16.0	17.5	18.0	12.5	15.0	16.0	12.0	14.0	16.0	9.0	12.0

0213228795 JORDAN CREEK NEAR SILVER HILL, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	11.5	12.0	13.5	12.5	13.0	15.5	14.5	15.0	16.0	15.0	15.5
2	12.0	11.0	11.5	14.0	13.0	13.5	15.0	13.5	14.0	16.0	15.5	16.0
3	12.0	11.5	11.5	13.5	12.5	13.0	15.0	12.5	14.0	16.5	15.0	16.0
4	11.5	11.0	11.5	14.0	13.0	13.5	15.0	13.5	14.5	16.0	14.5	15.5
5	11.0	10.0	11.0	15.0	14.0	14.0	15.5	14.5	15.0	16.0	14.5	15.5
6	11.0	9.5	10.5	14.0	12.5	13.5	16.0	15.0	15.5	16.0	14.5	15.5
7	11.5	10.5	11.0	13.5	12.0	12.5	15.5	14.5	15.0	16.5	15.5	16.0
8	11.0	10.0	10.5	14.0	12.5	13.5	15.0	13.5	14.5	16.0	16.0	16.0
9	11.0	9.5	10.0	14.0	13.5	14.0	14.5	13.0	13.5	16.0	15.5	16.0
10	11.0	9.5	10.5	14.0	12.5	13.0	14.0	12.0	13.0	16.5	16.0	16.5
11	11.5	10.0	11.0	13.5	12.5	13.0	14.5	12.5	13.5	16.5	16.0	16.5
12	11.0	10.5	10.5	14.5	13.5	14.0	15.0	13.5	14.0	17.0	16.5	16.5
13	11.0	10.0	10.5	14.0	12.5	13.5	15.5	14.5	15.0	17.0	16.5	17.0
14	11.0	10.0	10.5	15.0	13.0	14.0	15.5	15.0	15.0	17.5	16.5	17.0
15	11.0	10.0	10.5	14.5	13.0	14.0	16.0	15.0	15.5	17.5	16.5	17.0
16	11.0	9.5	10.0	14.0	12.5	13.0	16.0	15.0	15.5	17.5	17.0	17.0
17	11.0	9.5	10.5	14.5	13.5	14.0	16.0	14.5	15.5	17.0	16.5	17.0
18	11.5	10.0	10.5	13.5	12.5	13.0	16.0	14.5	15.5	17.0	16.0	16.5
19	11.5	10.5	11.0	13.5	11.5	12.5	16.5	15.0	15.5	17.0	15.5	16.5
20	12.0	11.0	11.5	13.5	12.0	13.0	16.5	15.0	16.0	17.0	16.0	16.5
21	12.0	10.5	11.5	13.0	12.5	13.0	16.5	15.0	16.0	17.5	16.5	17.0
22	12.5	11.0	12.0	12.5	12.5	12.5	16.5	15.0	16.0	17.5	17.0	17.0
23	13.0	12.0	12.5	13.5	12.5	13.0	16.5	15.5	16.0	17.5	17.0	17.5
24	13.5	12.5	13.0	14.0	13.0	13.5	16.0	15.0	15.5	17.0	17.0	17.0
25	13.5	13.5	13.5	13.5	12.5	13.0	16.5	15.0	16.0	17.0	16.5	17.0
26	14.0	13.5	13.5	13.5	12.0	13.0	16.5	14.5	15.5	17.0	16.0	16.5
27	14.5	13.5	14.0	14.0	12.5	13.5	16.5	15.0	16.0	17.0	16.0	16.5
28	13.5	12.5	13.0	15.0	13.5	14.0	16.5	16.0	16.0	17.0	16.5	17.0
29	---	---	---	15.5	14.0	15.0	16.5	15.5	16.0	17.5	17.0	17.0
30	---	---	---	16.0	14.5	15.0	16.0	14.5	15.5	17.5	17.0	17.5
31	---	---	---	16.0	15.0	15.5	---	---	---	17.5	17.0	17.5
MONTH	14.5	9.5	11.5	16.0	11.5	13.5	16.5	12.0	15.0	17.5	14.5	16.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.0	17.5	17.5	19.0	19.0	19.0	21.0	20.5	21.0	21.0	20.5	21.0
2	18.0	17.5	17.5	19.0	18.5	19.0	21.0	20.0	20.5	21.5	21.0	21.0
3	18.0	17.5	18.0	19.0	18.5	18.5	20.5	20.0	20.0	21.5	20.5	21.0
4	18.0	18.0	18.0	19.5	18.5	18.5	20.5	19.5	20.0	21.5	20.5	20.5
5	19.0	18.0	18.0	19.5	18.5	19.0	20.0	19.5	20.0	21.0	20.0	20.5
6	19.0	18.5	19.0	19.0	18.5	19.0	20.0	19.5	20.0	21.0	20.0	20.5
7	18.5	18.5	18.5	19.5	19.0	19.0	20.5	19.5	20.0	21.0	20.5	20.5
8	19.0	18.5	18.5	19.5	19.0	19.0	20.5	20.0	20.0	21.0	20.5	20.5
9	18.5	18.5	18.5	19.5	19.0	19.0	20.5	20.0	20.5	21.0	20.5	20.5
10	19.0	18.5	18.5	20.0	19.0	19.5	20.5	20.0	20.5	21.0	20.5	20.5
11	19.0	18.5	18.5	19.5	19.0	19.5	20.5	20.0	20.5	21.0	20.5	20.5
12	19.0	18.5	19.0	20.0	19.0	19.5	20.5	20.0	20.5	20.5	20.0	20.5
13	18.5	18.0	18.0	20.0	19.0	19.5	21.0	20.0	20.5	20.0	19.0	19.5
14	18.0	17.0	17.5	20.0	19.5	19.5	21.0	20.0	20.5	19.0	18.5	18.5
15	18.0	17.5	18.0	20.0	19.0	19.5	21.0	20.0	20.5	19.0	18.0	18.5
16	18.5	18.0	18.5	20.0	19.5	19.5	21.5	20.5	20.5	19.0	18.0	18.5
17	19.0	18.5	18.5	20.0	19.5	20.0	22.0	21.0	21.5	19.0	18.5	18.5
18	19.0	18.5	19.0	20.0	19.5	19.5	22.0	21.0	21.5	19.0	18.0	18.5
19	19.0	19.0	19.0	20.0	19.0	19.5	21.5	21.0	21.0	19.0	18.0	18.5
20	19.0	18.5	18.5	20.0	19.0	19.5	21.0	21.0	21.0	19.0	18.5	18.5
21	18.5	18.0	18.5	20.0	19.5	19.5	21.5	21.0	21.0	19.0	19.0	18.5
22	18.5	18.0	18.5	22.0	19.5	20.5	21.5	21.0	21.0	19.5	19.0	19.5
23	19.0	18.5	18.5	21.5	20.5	21.0	21.0	20.5	20.5	19.5	18.5	19.0
24	19.0	18.5	18.5	21.0	20.5	20.5	21.0	20.5	20.5	19.5	19.0	19.0
25	19.0	18.5	19.0	22.0	20.5	21.5	21.5	21.0	21.0	19.0	19.0	19.0
26	19.0	19.0	19.0	21.0	20.5	21.0	21.0	21.0	21.0	19.5	19.0	19.0
27	19.0	18.5	19.0	21.0	20.5	21.0	21.0	20.5	21.0	19.5	18.5	19.0
28	18.5	18.0	18.5	21.0	20.5	20.5	21.0	21.0	21.0	19.0	18.0	18.5
29	19.0	18.5	18.5	21.0	20.5	21.0	21.0	20.5	21.0	18.5	17.5	18.0
30	19.0	18.5	19.0	21.0	20.5	20.5	21.0	20.5	21.0	18.5	17.5	18.0
31	---	---	---	21.0	20.5	21.0	21.5	21.0	21.0	---	---	---
MONTH	19.0	17.0	18.5	22.0	18.5	20.0	22.0	19.5	20.5	21.5	17.5	19.5
YEAR	22.0	9.0	16.0									

0213294250 WHITE CEDAR BRANCH NEAR HOFFMAN, NC

LOCATION.--Lat 35°05'45", long 79°34'58", Richmond County, Hydrologic Unit 03040203, on left bank 0.6 mi downstream from Secondary Road 1465 and 2.7 mi northwest of Hoffman.

DRAINAGE AREA.--0.43 mi^2.

PERIOD OF RECORD.--September 1983 to current year.

REMARKS.--Station operated as partial-record site in the National Acid Precipitation Assessment Program for defining effects of atmospheric deposition on surface-water chemistry (station 0213228795).

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO 1985

DATE	TIME	*STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)
OCT , 1984								
30...	1115	.47	10	4.7	19.5	1	0	--
DEC								
18...	1230	.44	10	5.2	15.5	1	--	--
FEB , 1985								
20...	0900	.45	11	5.2	10.5	1	--	--
APR								
23...	0840	.35	9	5.4	18.5	1	--	--
23...	0845	.35	9	5.4	18.5	1	--	--
SEP								
04...	0900	.32	9	5.3	21.0	1	--	1.6

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM DIS-SOLVED (UG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT , 1984									
30...	.12	.20	1.0	120	<1.0	.3	1.4	<.01	4.3
DEC									
18...	.15	.22	1.1	160	<1.0	.3	1.4	.01	4.3
FEB , 1985									
20...	.20	.20	1.1	190	<1.0	.6	1.3	<.01	4.0
APR									
23...	.11	.21	1.0	150	--	.2	1.5	.01	--
23...	.10	.21	1.2	160	--	.2	1.5	.02	--
SEP									
04...	.12	.19	1.1	100	<.500	.2	1.5	.02	4.3

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN NITRATE DISSOLV (UG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT , 1984								
30...	8	250	.007	<.002	40	5	20	1.9
DEC								
18...	--	290	.007	<.005	30	<1	13	.80
FEB , 1985								
20...	--	260	.026	<.001	50	<1	16	1.4
APR								
23...	--	264	.005	<.010	--	--	--	1.4
23...	--	260	.005	<.010	--	--	--	1.4
SEP								
04...	--	240	.016	<.001	40	2	14	1.6

*Streamflow figures are actual discharge figures.

PEE DEE RIVER BASIN

0213297600 JOE'S BRANCH NEAR HOFFMAN, NC

LOCATION.--Lat 35°04'49", long 79°35'58", Richmond County, Hydrologic Unit 03040203, on left bank 5 ft downstream from culvert on Naked Creek Lane, 0.3 mi upstream from mouth, and 4.3 mi northwest of Hoffman.

DRAINAGE AREA.--0.46 mi^2.

PERIOD OF RECORD.--September 1983 to current year.

REMARKS.--Station operated as partial-record site in the National Acid Precipitation Assessment Program for defining effects of atmospheric deposition on surface-water chemistry (station 0213228795).

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	*STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)
OCT , 1984								
30...	1315	.41	10	4.9	18.5	1	0	--
DEC								
18...	1430	.56	10	5.0	14.5	2	--	--
FEB , 1985								
20...	1045	.48	11	5.0	10.5	1	--	--
APR								
23...	1015	.33	8	5.2	18.5	0	--	--
23...	1030	.33	8	5.2	18.5	0	--	--
JUL								
02...	0915	.38	11	4.8	19.5	1	--	--
SEP								
04...	1115	.50	9	5.0	22.0	0	--	.8

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM DIS-SOLVED (UG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT , 1984									
30...	.19	.17	.80	130	<1.0	.4	1.4	.01	4.6
DEC									
18...	.40	.17	.90	130	<1.0	.5	1.3	.01	4.5
FEB , 1985									
20...	.20	.20	.90	170	<1.0	1.0	1.3	<.01	4.3
APR									
23...	.09	.16	.76	130	--	.4	1.4	<.01	--
23...	.08	.14	.77	120	--	.4	1.4	.01	--
JUL									
02...	.14	.27	.97	2300	--	1.1	1.3	.02	4.6
SEP									
04...	.12	.17	.84	90	<.500	.4	1.4	.03	4.7

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN NITRATE DISSOLV (UG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT , 1984								
30...	8	<10.0	<.005	<.002	80	7	47	3.5
DEC								
18...	--	30.0	<.005	<.002	40	4	21	1.5
FEB , 1985								
20...	--	80.0	.022	<.001	60	3	24	1.7
APR								
23...	--	38.0	.006	<.010	--	--	--	2.2
23...	--	43.0	.010	<.010	--	--	--	2.2
JUL								
02...	--	20.0	.014	<.010	100	5	43	3.9
SEP								
04...	--	30.0	.009	<.001	60	3	34	2.4

*Streamflow figures are actual discharge measurements.

0213299360 DEEP CREEK TRIBUTARY NEAR WEST END, NC

LOCATION.--Lat 35°11'57", long 79°32'45", Moore County, Hydrologic Unit 03040203, on left bank 0.6 mi upstream from mouth and 2.9 mi southeast of West End.

DRAINAGE AREA.--0.24 mi².

PERIOD OF RECORD.--September 1983 to current year.

REMARKS.--Station operated as partial-record site in the National Acid Precipitation Assessment Program for defining effects of atmospheric deposition on surface-water chemistry (station 0213228795).

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	*STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM DIS-SOLVED (UG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)
OCT , 1984												
29...	1445	.12	14	4.5	18.5	0	--	.11	.07	.70	70	<1.0
DEC												
17...	1445	.11	14	4.5	14.0	0	--	.11	.09	.80	50	<1.0
FEB , 1985												
19...	1400	.20	18	4.4	9.0	0	--	.10	.10	.90	120	<1.0
APR												
22...	1400	.05	11	4.6	18.5	1	--	.26	.11	.95	190	--
22...	1405	.05	11	4.6	18.5	0	--	.10	.09	.78	100	--
JUL												
01...	1400	.22	21	4.2	19.5	--	--	<.01	.15	.88	80	--
SEP												
03...	1430	.16	16	4.3	22.5	0	2.5	.08	.09	.72	90	<.500

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN NITRATE DISSOLV (UG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT , 1984											
29...	.6	1.4	<.01	4.7	<10.0	<.005	<.002	80	6	50	2.2
DEC											
17...	.9	1.4	<.01	4.5	<10.0	.007	<.002	90	<1	33	2.6
FEB , 1985											
19...	1.6	1.3	.02	4.0	10.0	.023	<.001	110	<1	35	2.8
APR											
22...	.6	1.3	.01	--	<10.0	.009	<.010	--	--	--	3.4
22...	.6	1.3	.02	--	<10.0	.008	<.010	--	--	--	3.5
JUL											
01...	1.9	1.3	.02	4.9	11.0	.016	<.010	220	1	76	7.2
SEP											
03...	1.1	1.4	.03	4.4	<10.0	.019	<.001	140	1	63	4.6

*Streamflow figures are actual discharge measurements.

PEE DEE RIVER BASIN

02133500 DROWNING CREEK NEAR HOFFMAN, NC

LOCATION.--Lat 35°03'38", long 79°29'39", Richmond County, Hydrologic Unit 03040203, on right bank 10 ft downstream from bridge on U.S. Highway 1, 0.8 mi downstream from Deep Creek, 1 mi upstream from Seaboard Coast Line Railroad bridge, and 4 mi northeast of Hoffman.

DRAINAGE AREA.--183 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 972: 1941(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Since 1984, the town of Southern Pines withdraws water for public supply a short distance upstream from the gage causing some diurnal fluctuation at low flows; an average of 1.5 ft^3/s was diverted during the year.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 261 ft^3/s, 19.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,900 ft^3/s Sept. 18, 1945, gage height, 10.29 ft; minimum, 22 ft^3/s Oct. 5, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 850 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 29	1200	961	6.22	Aug. 23	1200	1,320	6.62
Aug. 19	2100	*2,180	*7.38	Aug. 27	0900	856	6.08

Minimum discharge, 38 ft^3/s June 29, 30, July 22, gage height, 1.50 ft; minimum daily, 39 ft^3/s June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	181	246	156	339	285	152	88	61	204	679	402
2	316	178	191	156	499	248	148	84	55	325	550	386
3	371	171	219	240	610	233	141	115	53	369	457	362
4	291	159	293	458	652	222	139	179	55	316	343	306
5	185	159	351	675	609	216	137	181	55	223	235	257
6	163	165	397	710	623	213	134	120	140	137	185	222
7	158	158	423	575	628	203	145	105	200	117	159	196
8	166	151	394	412	648	195	137	95	268	123	158	176
9	163	150	341	309	554	195	130	94	396	98	186	170
10	153	153	256	266	446	193	127	105	394	78	227	166
11	147	171	226	251	376	187	128	103	295	92	178	157
12	142	224	214	249	400	184	129	94	135	84	137	148
13	140	238	205	237	467	181	121	94	106	67	127	144
14	136	188	202	219	515	173	121	91	90	69	131	139
15	135	169	197	210	491	168	130	82	73	88	109	129
16	134	164	187	202	411	161	137	129	76	79	98	129
17	135	162	185	208	355	166	166	242	111	115	119	128
18	144	157	183	260	325	170	209	294	100	83	350	125
19	151	157	179	288	304	168	185	267	88	63	1300	121
20	148	161	177	248	305	156	134	136	113	50	1480	118
21	145	161	178	204	326	153	127	110	114	42	854	114
22	173	158	180	163	322	190	119	104	62	53	763	112
23	203	156	178	179	295	280	112	103	51	120	1210	120
24	220	156	173	188	275	316	106	107	53	117	908	125
25	193	156	168	193	266	278	105	99	53	400	647	125
26	171	155	166	197	263	212	104	88	52	845	611	125
27	164	155	162	185	285	187	97	78	56	823	820	125
28	172	167	159	188	303	173	92	74	54	752	775	116
29	214	230	158	203	---	165	96	70	39	912	652	102
30	216	282	157	217	---	155	92	69	73	844	516	103
31	189	---	157	244	---	150	---	69	---	857	441	---
TOTAL	5639	5192	6902	8482	11892	6168	3900	3669	3471	8545	15405	5148
MEAN	182	173	223	274	425	199	130	118	116	276	497	172
MAX	371	282	423	710	652	316	209	294	396	912	1480	402
MIN	134	150	157	156	263	150	92	69	39	42	98	102
CFSM	.99	.95	1.22	1.50	2.32	1.09	.71	.64	.63	1.51	2.72	.94
IN.	1.15	1.06	1.40	1.72	2.42	1.25	.79	.75	.71	1.74	3.13	1.05

CAL YR 1984 TOTAL 137162 MEAN 375 MAX 1580 MIN 118 CFSM 2.05 IN. 27.88
WTR YR 1985 TOTAL 84413 MEAN 231 MAX 1480 MIN 39 CFSM 1.26 IN. 17.16

02133500 DROWNING CREEK NEAR HOFFMAN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	1300	WATER	0	3.91	190	34	6.00	23.0		7.3	70
84/11/13	1440	WATER	0	4.37	238	22	5.54	11.0		10.4	330
84/12/12	1050	WATER	0	4.17	213	26	6.36	9.0	2.2	11.1	40
85/01/30	1015	WATER	0	4.22	218	28	5.40	6.0		12.0	40
85/02/11	1425	WATER	0	5.15	370	40	5.05	8.0		11.6	10
85/03/26	1050	WATER	0	4.15	211	25	6.22	12.0	2.5	9.6	50
85/04/17	0900	WATER	0	3.48	157	24	6.24	16.0		8.4	100
85/05/15	0805	WATER	0	2.25	83	22	6.03	21.0		7.8	80
85/06/17	1420	WATER	0	2.86	129	16	5.94	22.0	5.2	7.3	110
85/07/30	0815	WATER	0	5.97	779	26	4.91	23.0		5.6	30
85/08/28	1235	WATER	0.15	5.91	737	21	4.72	24.0		5.8	10
85/09/12	1335	WATER	0.15	3.30	146	20	5.87	24.0	4.1	7.6	50

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	1300	WATER	0	4	5	120					
84/11/13	1440	WATER	0	2	4	56					
84/12/12	1050	WATER	0	5	3	50	.36	.020	.300	.010	.010K
85/01/30	1015	WATER	0		1	44					
85/02/11	1425	WATER	0		2	29					
85/03/26	1050	WATER	0	7	3	55	.32	.180	.400	.010	.010K
85/04/17	0900	WATER	0	5	7	55					
85/05/15	0805	WATER	0	6	2	45					
85/06/17	1420	WATER	0	5	6	66	.18	.020	.200	.040	.010K
85/07/30	0815	WATER	0	3	8	91					
85/08/28	1235	WATER	0.15	2	3	64					
85/09/12	1335	WATER	0.15	6	7	63	.18	.020	.200	.030	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/12	1050	WATER	0	10K	20K	50K	20K	100K	.6	100K	20K
85/03/26	1050	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/17	1420	WATER	0	10K	20K	50K	20K	100K	.3K	100K	20K
85/09/12	1335	WATER	0.15	10K	20K	50K	20K	100K	.7	100K	20K

K Less than noted value.

PEE DEE RIVER BASIN

02134500 LUMBER RIVER AT BOARDMAN, NC

LOCATION.--Lat 34°26'32", long 78°57'38", Robeson County, Hydrologic Unit 03040203, on right bank 50 ft downstream from bridge on U.S. Highway 74, 1 mi downstream from Seaboard Coast Line Railroad bridge at Boardman, 1.5 mi downstream from Big Swamp, and 40.5 mi upstream from mouth.

DRAINAGE AREA.--1,228 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1929 to current year.

REVISED RECORDS.--WSP 1303: 1932(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 72.05 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Army Corps of Engineers). Prior to Sept. 30, 1936, nonrecording gage at site 100 ft downstream at same datum. Sept. 30, 1936 to June 8, 1943, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--56 years, 1,331 ft³/s, 14.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s Sept. 24, 1945, gage height, 10.64 ft; minimum, 66 ft³/s Oct. 9, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1928 reached a stage of 11.8 ft, from floodmark witnessed by local resident, discharge, 25,000 ft³/s. Flood of July 22, 1901, the highest during the period 1896-1913, reached a stage of 10.8 ft, from observations by Butters Lumber Co., discharge, 14,800 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,530 ft³/s Feb. 14, gage height, 7.88 ft; minimum, 169 ft³/s June 30, gage height 1.89 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	758	793	428	508	1000	2000	976	273	233	268	2640	2110
2	700	849	442	497	1090	1920	954	256	215	460	3290	1970
3	655	878	463	566	1230	1850	916	259	199	521	3440	1830
4	635	864	483	636	1360	1770	859	270	187	572	3460	1740
5	631	830	519	723	1650	1690	785	257	178	680	3380	1680
6	634	790	567	896	2040	1610	717	253	193	775	3250	1610
7	633	746	611	1080	2380	1540	656	265	229	796	3080	1510
8	631	701	661	1170	2680	1470	599	284	272	745	2990	1400
9	626	654	709	1220	2960	1410	545	302	348	647	2910	1280
10	620	608	748	1250	3110	1350	502	314	409	561	2640	1170
11	615	571	769	1280	3170	1280	482	321	462	509	2380	1060
12	604	536	787	1340	3350	1230	472	315	517	495	2190	955
13	580	505	813	1420	3450	1180	455	310	557	461	2000	857
14	536	479	843	1520	3510	1130	439	317	592	328	1810	752
15	483	458	871	1590	3470	1080	428	315	633	310	1640	655
16	444	443	890	1570	3340	1030	422	323	698	309	1490	576
17	418	437	896	1510	3160	1020	440	428	739	286	1360	518
18	436	437	882	1420	2960	988	456	436	737	276	1340	476
19	450	444	839	1290	2780	943	448	426	708	266	1270	434
20	451	453	779	1220	2670	903	434	409	613	247	1170	394
21	441	457	725	1160	2590	868	419	428	452	225	1050	359
22	436	451	683	1100	2520	855	413	471	408	213	945	349
23	441	439	646	1060	2500	852	419	499	354	209	873	344
24	442	423	620	1030	2480	860	430	501	306	242	866	321
25	440	406	598	1030	2420	883	433	493	271	401	936	310
26	439	392	577	1020	2330	910	410	469	243	573	1070	301
27	436	384	560	1000	2210	935	359	391	215	784	1450	294
28	441	386	547	993	2100	955	311	314	192	1020	2020	285
29	523	401	539	981	---	968	311	289	176	1270	2250	280
30	617	414	527	957	---	981	297	265	174	1420	2280	277
31	714	---	517	964	---	984	---	249	---	1910	2230	---
TOTAL	16910	16629	20539	34001	70510	37445	15787	10702	11510	17779	63700	26097
MEAN	545	554	663	1097	2518	1208	526	345	384	574	2055	870
MAX	758	878	896	1590	3510	2000	976	501	739	1910	3460	2110
MIN	418	384	428	497	1000	852	297	249	174	209	866	277
CFSM	.44	.45	.54	.89	2.05	.98	.43	.28	.31	.47	1.67	.71
IN.	.51	.50	.62	1.03	2.14	1.13	.48	.32	.35	.54	1.93	.79

CAL YR 1984 TOTAL 562434 MEAN 1537 MAX 4380 MIN 373 CFSM 1.25 IN. 17.04
WTR YR 1985 TOTAL 341609 MEAN 936 MAX 3510 MIN 174 CFSM .76 IN. 10.35

02134500 LUMBER RIVER AT BOARDMAN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/09	1300	WATER	0	4.41	624	104	6.34	22.0	1.7	7.1	40
84/11/15	1410	WATER	0	3.89	456	106	6.62	12.0	4.2	10.6	20
84/12/13	1340	WATER	0	5.04	816	108	6.49	15.0	1.8	9.0	10
85/01/08	1520	WATER	0	5.75	1180	59	7.00	10.0		9.4	370
85/02/19	1230	WATER	0	7.27	2770	66	6.30	9.0		10.2	20
85/03/21	1134	WATER	0	4.94	909	87	6.66	13.0	2.8	7.8	20
85/04/24	1145	WATER	0	3.74	442	119	6.85	21.0		5.2	10K
85/05/14	1115	WATER	0	3.16	307	156	7.03	23.0		6.0	50
85/06/13	1310	WATER	0	4.05	559	112	6.64	25.0	1.8	4.7	80
85/07/11	1144	WATER	0	3.78	506	91	6.53	26.0		5.6	30
85/08/15	1515	WATER	0.15	6.24	1620	66	5.78	25.0		6.0	20
85/09/05	1150	WATER	0.15	6.34	1680	51	5.77	25.0	1.1	4.4	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/09	1300	WATER	0	14	5	84	.15	.020	.500	.120	.040
84/11/15	1410	WATER	0	12	3	130	.25	.040	.400	.180	.090
84/12/13	1340	WATER	0	8	1K	110	.04	.030	.400	.080	.040
85/01/08	1520	WATER	0	16	2	92	.28	.010K	.300	.080	.040
85/02/19	1230	WATER	0	8	1	77	.41	.070	.200	.040	.010
85/03/21	1134	WATER	0	16	1K	88	.26	.020	.300	.100	.050
85/04/24	1145	WATER	0	25	4	110	.35	.080	.600	.290	.200
85/05/14	1115	WATER	0	35	3	130	.65	.060	.500	.370	.250
85/06/13	1310	WATER	0	21	4	160	.33	.050	.600	.200	.120
85/07/11	1144	WATER	0	16	5	100	.32	.110	.600	.180	.120
85/08/15	1515	WATER	0.15	10	2	110	.12	.040	.700	.130	.070
85/09/05	1150	WATER	0.15	11	3	180	.07	.020	.700		.110

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/12/13	1340	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/21	1134	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/06/13	1310	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/05	1150	WATER	0.15	10K	20K	50K	20K	100K	.2	100K	20K

K Less than noted value.

SANTEE RIVER BASIN

02137727 CATAWBA RIVER NEAR PLEASANT GARDENS, NC

LOCATION.--Lat 35°41'09", long 82°03'40", McDowell County, Hydrologic Unit 03050101, on right bank 18 ft downstream from bridge on Secondary Road 1221, 0.8 mi upstream from Buck Creek, 0.8 mi southeast of Pleasant Gardens, and at mile 297.

DRAINAGE AREA.--126 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1563, 1970-73, 1975. October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. About 2.3 ft^3/s is diverted by the town of Marion for water supply.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--5 years, 243 ft^3/s, 25.98 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft^3/s Feb. 2, 1983, gage height, 13.60 ft, from rating curve extended above 3,590 ft^3/s on basis of contracted-opening measurement of peak flow; minimum, 51 ft^3/s Sept. 1, 1981, gage height, 1.12 ft and Dec. 11, 1981, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	0415	*3,640	*7.43	Aug. 17	1945	3,290	7.05

Minimum discharge, 67 ft^3/s July 21; minimum gage height, 1.24 ft June 28, July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	116	156	111	472	200	150	162	108	161	308	216
2	115	116	146	145	585	194	137	164	112	171	252	192
3	110	113	158	297	372	185	134	167	130	129	212	178
4	110	164	141	366	278	181	133	151	112	139	190	167
5	110	154	223	279	258	178	133	145	164	141	169	158
6	110	128	254	213	258	168	235	141	108	118	158	153
7	110	120	193	190	242	163	163	136	172	141	199	151
8	115	116	174	173	215	162	151	140	190	105	200	148
9	115	115	164	160	200	166	147	147	124	95	193	171
10	113	120	156	153	195	157	143	147	110	94	197	174
11	108	241	150	148	298	154	140	143	160	99	222	153
12	105	146	144	141	1810	154	137	182	149	87	193	161
13	103	131	139	136	558	147	136	172	117	101	159	149
14	101	124	135	135	399	147	154	171	108	89	145	137
15	102	121	132	130	332	142	746	143	104	91	137	134
16	103	118	130	125	289	140	887	143	103	105	139	122
17	102	114	128	135	262	141	523	150	101	87	1380	121
18	103	112	126	133	241	136	380	141	109	78	931	120
19	102	122	125	126	231	134	317	130	97	75	447	108
20	102	117	124	119	222	134	278	124	94	73	331	105
21	125	110	123	96	211	133	248	121	91	71	282	104
22	162	109	123	134	205	231	227	121	89	100	239	107
23	131	108	118	130	203	210	213	119	89	251	214	103
24	131	108	116	130	202	187	237	120	106	481	208	121
25	236	107	117	128	209	169	240	123	111	697	248	107
26	138	106	113	123	258	159	202	111	89	494	307	101
27	121	106	113	120	220	154	192	106	83	405	300	105
28	139	416	113	121	206	152	186	103	79	308	242	99
29	145	238	112	118	---	149	177	113	82	327	250	97
30	126	177	111	116	---	145	166	167	175	326	306	97
31	119	---	111	150	---	143	---	118	---	463	240	---
TOTAL	3732	4193	4368	4781	9431	5015	7312	4321	3466	6102	8998	4059
MEAN	120	140	141	154	337	162	244	139	116	197	290	135
MAX	236	416	254	366	1810	231	887	182	190	697	1380	216
MIN	101	106	111	96	195	133	133	103	79	71	137	97
CFSM	.94	1.10	1.11	1.21	2.65	1.28	1.92	1.09	.91	1.55	2.28	1.06
IN.	1.09	1.23	1.28	1.40	2.76	1.47	2.14	1.27	1.02	1.79	2.64	1.19

CAL YR 1984 TOTAL 108465 MEAN 296 MAX 2370 MIN 101 CFSM 2.33 IN. 31.77
WTR YR 1985 TOTAL 65778 MEAN 180 MAX 1810 MIN 71 CFSM 1.42 IN. 19.27

02137727 CATAWBA RIVER NEAR PLEASANT GARDENS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/16	0915	WATER	0	1.45	103	36	6.90	15.0		8.7	240
84/11/30	0930	WATER	0	1.79	178	35	6.60	6.0	4.5	12.5	4600
84/12/28	0950	WATER	0	1.50	113	40	6.70	8.0		10.7	110
85/01/08	1000	WATER	0	1.77	173	28	6.80	2.0		11.4	2600
85/02/06	0950	WATER	0	2.06	247	36	6.80	4.0	4.2	12.1	1200
85/03/22	0930	WATER	0	2.00	230	41	6.60	7.0		11.7	4300
85/04/23	0945	WATER	0	1.93	212	38	6.90	16.0		9.1	3400
85/05/14	0900	WATER	0	1.78	175	44	7.00	18.0	9.4	8.0	4700
85/06/04	0930	WATER	0.1	1.47	107						
85/07/09	0915	WATER	0	1.35	92	44	6.90	21.0		7.7	630
85/08/08	0930	WATER	0	1.98	225		7.00	20.0	18.0	8.2	5600
85/09/12	1000	WATER	0.1	1.69	154	44	6.80	20.5		7.9	2900

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/16	0915	WATER	0	14	11	51					
84/11/30	0930	WATER	0	11	10	62	.14	.030	.100	.050	.020
84/12/28	0950	WATER	0	13	6	56					
85/01/08	1000	WATER	0	12	3	49					
85/02/06	0950	WATER	0	10	6	68	.24	.040	.200	.040	.010
85/03/22	0930	WATER	0	12	10	63					
85/04/23	0945	WATER	0	14	8	46					
85/05/14	0900	WATER	0	14	18	75	.19	.060	.300	.080	.010
85/07/09	0915	WATER	0	15	25	64					
85/08/08	0930	WATER	0	13	33	100	.17	.080	.200	.080	.020
85/09/12	1000	WATER	0.1	13	42	110					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/30	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/06	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/14	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/08	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02138500 LINVILLE RIVER NEAR NEBO, NC

LOCATION.--Lat 35°47'41", long 81°53'25", Burke County, Hydrologic Unit 03050101, in Pisgah National Forest, on right bank 370 ft upstream from bridge on State Highway 126, 0.2 mi downstream from Shooks Creek, 0.5 mi upstream from Lake James, 2.0 mi northeast of Longtown, and 6.0 mi northeast of Nebo.

DRAINAGE AREA.--66.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1907 to August 1908 (fragmentary). June 1922 to current year. Published as "at Fonta Flora" prior to 1908 and as "at Branch" 1923-70. Records for October to December 1908, "at Fonta Flora", published in WSP 242 have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 892: 1929, 1935, 1937. WSP 1503: 1923(M), 1924-28, 1930, 1932-33(M), 1938(M), 1939(P). WDR NC-80-1: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,203.87 ft above National Geodetic Vertical Datum of 1929 . May 1907 to August 1908, nonrecording gage about 1.2 mi downstream at different datum. June 1922 to Aug. 27, 1937, nonrecording gage, and Aug. 28, 1937 to Sept. 30, 1970, water-stage recorder at site on right bank 20 ft downstream from bridge on State Highway 126 at datum 1.00 ft higher. Oct. 1, 1970 to Sept. 30, 1973 at present site at datum 1.00 ft higher. Oct. 1, 1973 to Aug. 25, 1981 at present site at datum 1.00 ft higher.

REMARKS.--Records fair.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--63 years, (1923-85), 150 ft^3/s, 30.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,500 ft^3/s Aug. 13, 1940, gage height, 11.4 ft, site and datum then in use, from rating curve extended above 6,400 ft^3/s on basis of slope-area measurement of peak flow; minimum, 2 ft^3/s Jan. 9, 1956 (result of freezeup); minimum daily, 8 ft^3/s Sept. 7-9, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of about 11 ft at former site and datum, discharge, 34,600 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 15	2300	1,650	4.05	Aug. 17	2330	*1,680	*4.07

Minimum discharge, 26 ft^3/s, Oct. 7, 8; minimum gage height, 1.82 ft Jan. 21, result of freezeup; minimum daily, 26 ft^3/s Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	43	109	50	152	166	90	103	59	85	109	91
2	38	40	92	61	352	152	86	102	66	76	105	84
3	32	42	88	107	252	138	76	103	95	69	92	78
4	30	45	80	188	170	131	74	94	86	60	83	73
5	29	65	77	175	144	126	75	83	74	59	73	69
6	27	58	86	120	148	120	131	66	72	64	76	66
7	26	50	80	110	137	110	120	57	84	56	74	62
8	27	49	73	100	107	105	98	61	113	48	83	63
9	30	42	72	90	101	106	94	65	82	44	135	128
10	32	38	70	83	112	101	91	69	72	42	105	128
11	33	97	68	80	115	94	87	76	161	39	94	85
12	33	61	67	76	554	94	83	82	118	48	83	69
13	32	54	65	56	230	92	80	147	93	44	75	65
14	32	48	65	e60	166	86	83	122	78	43	74	63
15	31	42	63	e60	148	84	302	248	73	49	70	51
16	31	42	59	58	119	80	543	510	68	44	71	38
17	49	61	59	74	122	76	330	227	65	50	703	35
18	63	39	59	69	107	75	230	169	62	49	731	33
19	52	38	58	69	104	73	184	140	58	43	285	31
20	43	41	58	62	105	71	157	125	55	38	206	31
21	42	41	60	60	108	70	148	113	52	35	172	31
22	46	41	60	54	114	85	127	105	50	35	143	31
23	42	40	58	e52	137	148	117	143	49	51	125	31
24	39	38	55	e55	191	130	131	105	48	59	116	74
25	55	39	54	64	213	120	170	96	46	148	120	87
26	54	39	54	e60	272	104	133	99	43	200	133	54
27	43	39	53	e55	226	95	118	93	39	148	139	47
28	43	470	52	54	191	90	121	74	37	147	156	41
29	46	279	52	55	---	88	125	76	36	150	133	37
30	46	142	52	55	---	85	127	84	72	147	113	34
31	48	---	50	59	---	82	---	67	---	142	102	---
TOTAL	1213	2163	2048	2371	4897	3177	4331	3704	2106	2312	4779	1810
MEAN	39.1	72.1	66.1	76.5	175	102	144	119	70.2	74.6	154	60.3
MAX	63	470	109	188	554	166	543	510	161	200	731	128
MIN	26	38	50	50	101	70	74	57	36	35	70	31
CFSM	.59	1.08	.99	1.15	2.62	1.53	2.16	1.78	1.05	1.12	2.31	.90
IN.	.68	1.21	1.14	1.32	2.73	1.77	2.42	2.07	1.17	1.29	2.67	1.01

CAL YR 1984 TOTAL 56534 MEAN 154 MAX 2350 MIN 26 CFSM 2.31 IN. 31.53
WTR YR 1985 TOTAL 34911 MEAN 95.6 MAX 731 MIN 26 CFSM 1.43 IN. 19.47

e Estimated

02138500 LINVILLE RIVER NEAR NEBO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/16	1310	WATER	0	1.08	31	41	6.30	18.0		9.6	20
84/11/14	1420	WATER	0	1.21	46	40	7.40	8.0	1.6	15.4	10K
84/12/12	1340	WATER	0	1.35	69	40	6.50	6.0		11.1	10K
85/01/23	1420	WATER	0	1.36	80	45	7.60	.0		13.3	10K
85/02/13	1245	WATER	0	1.91	222	48	6.10	2.0	3.0	12.4	20
85/03/11	1245	WATER	0	1.41	94	39	6.20	9.0		13.4	10K
85/04/16	1200	WATER	0	2.55	506	43	6.30	12.0		11.4	360
85/05/14	1330	WATER	0	1.51	112	40	6.40	20.0	14.0	10.1	270
85/06/13	1200	WATER	0	1.43	92	37	6.80	19.0		9.4	10K
85/07/17	1205	WATER	0	1.19	52	47	6.50	23.0		9.9	40
85/08/20	1145	WATER	0.1	1.79	206	41	6.50	20.0	3.8	9.0	220
85/09/16	1230	WATER	0.1	1.11	37	52	6.10	17.0		10.2	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/16	1310	WATER	0	10	11	53					
84/11/14	1420	WATER	0	45	2	58	.09	.040	.200	.010	.010K
84/12/12	1340	WATER	0	11	10	68					
85/01/23	1420	WATER	0	14	2	25					
85/02/13	1245	WATER	0	8	8	38	.22	.010	.200	.020	.010K
85/03/11	1245	WATER	0	13	4	99					
85/04/16	1200	WATER	0	6	36	99					
85/05/14	1330	WATER	0	10	17	52	.19	.030	.300	.050	.010K
85/06/13	1200	WATER	0	13	7	38					
85/07/17	1205	WATER	0	12	3	34					
85/08/20	1145	WATER	0.1	11	12	100	.17	.010	.300	.030	.010K
85/09/16	1230	WATER	0.1	22	1	78					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/14	1420	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/13	1245	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/14	1330	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/20	1145	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02142000 LOWER LITTLE RIVER NEAR ALL HEALING SPRINGS, NC

LOCATION.--Lat 35°56'44", long 81°14'13", Alexander County, Hydrologic Unit 03050101, on left bank at upstream side of bridge on Secondary Road 1313, 0.3 mi downstream from Grassy Creek, 0.4 mi upstream from Lambert Creek, 2.2 mi northeast of All Healing Springs, and 4 mi northwest of Taylorsville.

DRAINAGE AREA.--28.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October to December 1952 (monthly discharge only), January 1953 to current year.

REVISED RECORDS.--WDR NC-79-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,070 ft, by barometer. Prior to June 13, 1953, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--33 years, 38.4 ft³/s, 18.49 in/yr.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,850 ft³/s Aug. 10, 1970, gage height, 15.68 ft; minimum, 2.9 ft³/s Sept. 20, 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 550 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	2000	*570	*5.45	No other peak greater than base discharge.			

Minimum discharge, 8.2ft³/s July 21, 22, Sept. 27, 28, 29, 30, gage height, 0.88 ft; minimum daily 8.8 ft³/s Sept. 28, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	22	23	20	94	26	20	18	13	16	23	19
2	27	22	23	25	131	25	20	19	15	14	21	18
3	26	21	25	57	69	25	19	20	14	12	16	17
4	25	27	22	80	51	24	19	18	13	13	14	16
5	24	27	31	55	46	24	19	17	16	14	13	15
6	24	23	35	41	43	23	26	17	16	14	13	15
7	24	22	27	35	40	22	20	17	48	14	13	14
8	26	21	25	31	36	23	20	16	34	12	59	13
9	25	21	24	29	34	22	19	16	20	12	44	14
10	25	21	23	28	31	21	19	17	21	12	23	15
11	24	25	23	27	35	21	19	19	47	12	19	13
12	24	21	22	25	104	21	19	18	31	11	16	12
13	23	20	22	25	62	21	19	17	20	11	14	12
14	23	20	22	25	48	21	19	16	18	14	13	12
15	23	20	21	24	42	21	21	24	17	14	12	12
16	23	20	20	24	37	20	23	45	16	13	11	12
17	23	20	20	26	35	20	22	27	15	11	153	11
18	23	20	20	25	32	20	20	21	14	10	134	11
19	23	22	20	25	31	20	20	18	13	9.7	43	11
20	22	20	20	24	29	20	19	17	13	9.3	30	10
21	23	19	20	e17	29	20	18	17	12	9.0	25	10
22	31	19	21	e19	28	30	18	17	12	10	20	10
23	26	20	19	e21	27	29	17	19	12	11	19	10
24	24	20	19	23	26	25	24	21	12	13	19	10
25	24	19	19	22	28	23	24	19	11	17	34	9.3
26	24	19	19	e21	34	22	20	16	11	27	26	9.3
27	23	19	19	e21	28	22	20	15	11	26	25	9.0
28	24	37	19	22	27	21	20	14	11	38	25	8.8
29	25	28	20	21	---	21	19	14	12	39	21	8.8
30	25	25	20	21	---	21	18	14	12	22	26	8.8
31	23	---	20	27	---	20	---	15	---	19	25	---
TOTAL	769	660	683	886	1257	694	600	578	530	479.0	949	366.0
MEAN	24.8	22.0	22.0	28.6	44.9	22.4	20.0	18.6	17.7	15.5	30.6	12.2
MAX	40	37	35	80	131	30	26	45	48	39	153	19
MIN	22	19	19	17	26	20	17	14	11	9.0	11	8.8
CFSM	.88	.78	.78	1.01	1.59	.79	.71	.66	.63	.55	1.09	.43
IN.	1.01	.87	.90	1.17	1.66	.92	.79	.76	.70	.63	1.25	.48

CAL YR 1984	TOTAL	19701	MEAN	53.8	MAX	980	MIN	19	CFSM 1.91	IN.	25.99
WTR YR 1985	TOTAL	8451.0	MEAN	23.2	MAX	153	MIN	8.8	CFSM .82	IN.	11.15

e Estimated

02142000 LOWER LITTLE RIVER NEAR ALL HEALING SPRINGS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/23	1020	WATER	0	1.21	19	45	6.40	.0		14.0	60
85/02/07	1215	WATER	0	1.46	39	66	6.20	4.0	9.3	12.6	450
85/03/13	1145	WATER	0	1.18	21	46	6.20	10.0		12.6	160
85/04/18	1105	WATER	0	1.15	19	49	6.30	14.0		12.0	790
85/05/21	1100	WATER	0	1.04	14	47	6.70	18.0	15.0	9.6	1400
85/06/18	1145	WATER	0	1.06	15	51	6.70	21.0		7.7	560
85/07/18	1000	WATER	0	.95	12	57	6.40	21.0		9.0	540
85/08/19	1255	WATER	0.1	1.48	41	60	6.70	21.0	26.0	8.4	2200
85/09/10	1025	WATER	0.1	1.05	14	72	6.40	20.0		8.5	1500

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/23	1020	WATER	0	12	7	49	.28	.040	.200	.020	.010
85/02/07	1215	WATER	0	12	9	120	.41	.030	.200	.030	.010
85/03/13	1145	WATER	0	12	2	63	.25	.020	.100	.030	.010
85/04/18	1105	WATER	0	14	8	64	.21	.050	.200	.040	.010K
85/05/21	1100	WATER	0	15	16	68	.29	.080	.200	.050	.010
85/06/18	1145	WATER	0	18	12	72	.33	.070	.100	.060	.010
85/07/18	1000	WATER	0	20	9	49	.30	.050	.300	.060	.010
85/08/19	1255	WATER	0.1	16	38	250	.37	.060	.300	.080	.010
85/09/10	1025	WATER	0.1	18	13	61	.33	.100	.300	.060	.020

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/07	1215	WATER	0	10K	20K	50K	20K	100K		100K	20K
85/05/21	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/19	1255	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K- Less than noted value.

0214253830 NORWOOD CREEK NEAR TROUTMAN, NC

LOCATION.--Lat 35°40'48", long 80°56'44". Iredell County, Hydrologic Unit 03040102, on left upstream wingwall of culvert on Secondary Road 1328, 0.4 mi upstream from Lake Norman, 0.7 mi downstream from Powder Spring Branch, 1.0 mi northeast of community of East Monbo, and 3.7 mi southwest of Troutman.

DRAINAGE AREA.--7.18 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 761.09 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 567 ft³/s Apr. 10, 1984, gage height 6.34 ft; minimum, 1.9 ft³/s July 20, 21, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 12	0115	199	4.27	Aug. 17	1415	*271	*4.86

Minimum discharge 1.9 ft³/s July 20, 21, gage height, 1.27 ft; minimum daily 2.2 ft³/s July 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	4.2	5.8	4.3	78	7.9	5.7	3.4	3.6	8.3	4.0	4.4
2	3.8	4.1	6.3	4.8	56	7.4	5.7	4.2	3.8	4.3	5.0	4.1
3	3.6	3.9	9.0	11	23	6.8	5.8	4.3	3.8	3.4	3.5	3.9
4	3.5	5.5	6.7	33	15	6.6	5.7	3.5	3.4	3.3	3.1	3.7
5	3.6	5.2	15	18	17	6.4	5.4	3.5	7.2	3.4	3.2	3.8
6	3.8	4.6	15	12	21	6.2	5.9	3.5	13	3.0	3.1	3.6
7	3.8	4.3	8.8	9.8	17	6.1	5.2	3.3	25	2.9	3.2	3.4
8	3.9	4.3	7.3	8.4	12	5.9	5.3	3.0	26	2.5	e3.2	3.4
9	4.0	4.2	6.6	7.7	10	5.7	5.7	3.2	8.9	2.6	e3.4	3.5
10	4.0	4.2	6.6	7.3	9.1	5.7	5.5	3.8	6.2	3.4	e3.0	3.3
11	3.9	4.6	6.1	7.0	13	5.8	5.5	3.9	5.7	3.8	e2.9	3.1
12	3.9	4.1	5.5	6.7	85	5.5	5.9	3.6	4.8	3.3	e2.8	3.1
13	3.9	4.1	5.2	6.7	22	5.4	5.6	3.3	4.0	3.3	e2.7	3.0
14	4.0	4.1	5.1	6.7	15	5.5	5.1	3.3	3.8	3.0	e2.6	3.0
15	4.0	4.2	5.0	6.2	12	5.7	5.2	5.9	3.8	3.1	e2.5	3.0
16	3.9	4.4	4.9	6.0	11	5.6	5.6	28	4.1	3.1	3.7	3.0
17	4.0	4.7	4.8	6.5	9.5	5.3	5.3	20	3.8	2.6	130	3.0
18	4.1	4.3	4.7	6.2	8.5	5.1	4.9	8.7	3.4	2.4	52	3.1
19	4.0	4.6	4.7	6.0	7.9	5.3	4.9	6.5	3.6	2.3	18	2.8
20	4.1	4.3	4.8	e5.0	7.1	5.3	4.6	5.7	3.4	2.2	11	2.8
21	4.0	4.2	4.6	e3.8	6.7	5.8	4.7	5.3	2.8	2.2	8.8	2.9
22	9.0	4.3	4.9	e4.5	6.8	9.3	4.6	5.0	2.8	9.5	7.0	2.8
23	4.5	4.4	4.5	e4.9	6.3	8.1	4.9	4.8	2.8	7.8	5.9	2.8
24	4.4	4.5	4.5	e4.9	6.0	6.9	5.7	4.7	2.7	5.9	11	4.0
25	4.3	4.5	4.4	e4.9	7.0	6.5	4.8	4.5	2.6	7.1	12	3.9
26	4.1	4.5	4.3	5.6	14	6.3	3.8	4.2	2.4	6.7	7.7	3.2
27	4.1	4.5	4.3	6.4	9.9	6.2	3.8	3.9	2.3	5.2	6.5	2.9
28	4.3	12	4.4	5.9	8.7	6.0	4.1	3.8	2.4	9.7	14	2.9
29	5.5	8.0	4.3	5.6	---	6.2	3.6	4.2	5.0	7.6	7.7	2.9
30	5.8	6.2	4.3	5.5	---	6.7	3.5	4.0	7.5	5.1	5.7	2.9
31	4.4	---	4.3	9.3	---	5.9	---	3.9	---	4.2	5.0	---
TOTAL	134.7	145.0	186.7	240.6	514.5	193.1	152.0	172.9	174.6	137.2	354.2	98.2
MEAN	4.35	4.83	6.02	7.76	18.4	6.23	5.07	5.58	5.82	4.43	11.4	3.27
MAX	9.0	12	15	33	85	9.3	5.9	28	26	9.7	130	4.4
MIN	3.5	3.9	4.3	3.8	6.0	5.1	3.5	3.0	2.3	2.2	2.5	2.8
CFSM	.61	.67	.84	1.08	2.56	.87	.71	.78	.81	.62	1.59	.46
IN.	.70	.75	.97	1.25	2.67	1.00	.79	.90	.90	.71	1.84	.51

CAL YR 1984	TOTAL	3760.5	MEAN	10.3	MAX	227	MIN	2.4	CFSM	1.43	IN.	19.48
WTR YR 1985	TOTAL	2503.7	MEAN	6.86	MAX	130	MIN	2.2	CFSM	.96	IN.	12.97

e Estimated

0214253830 NORWOOD CREEK NEAR TROUTMAN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/11	1200	WATER	0	1.32	4	76	6.60	17.0		7.0	580
84/11/07	1410	WATER	0	1.35	5	41	6.30	11.0	8.3	12.2	140
84/12/04	1530	WATER	0	1.44	7	60	7.00	7.0		11.8	370
85/01/16	1345	WATER	0	1.42	6	66	6.60	3.0		11.3	140
85/02/13	1500	WATER	0	1.78	20	56	6.30	6.0	60.0	11.0	140
85/03/12	1315	WATER	0	1.41	6	78	6.70	14.0		11.4	130
85/04/01	1350	WATER	0	1.40	5	66	7.40	18.0		9.0	60
85/05/06	1300	WATER	0	1.32	4	66	7.00	15.0	10.0	7.8	140
85/06/12	1230	WATER	0	1.42	5	78	6.90	20.0		6.4	870
85/07/24	1015	WATER	0.1	1.46	6	61	6.40	20.0		7.8	1200
85/08/15	1220	WATER	0.1	1.31	3	100	6.90	21.0	26.0	6.5	350
85/09/12	1200	WATER	0.1	1.35	3	99	6.20	19.0		7.2	270

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/11	1200	WATER	0	21	10	120					
84/11/07	1410	WATER	0	23	4	59	.14	.020	.200	.050	.010K
84/12/04	1530	WATER	0	23	4	44					
85/01/16	1345	WATER	0	23	5	95					
85/02/13	1500	WATER	0	14	52	130	.34	.040	.200	.080	.010K
85/03/12	1315	WATER	0	20	45	130					
85/04/01	1350	WATER	0	16	10	74					
85/05/06	1300	WATER	0	23	16	81	.20	.040	.200		.020
85/06/12	1230	WATER	0	27	47	210					
85/07/24	1015	WATER	0.1	23	64	250					
85/08/15	1220	WATER	0.1	31	67	220	.28	.030	.300	.140	.020
85/09/12	1200	WATER	0.1	31	13	150					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/07	1410	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/13	1500	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/06	1300	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/15	1220	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	60

K Less than noted value.

02142900 LONG CREEK NEAR PAW CREEK, NC

LOCATION.--Lat 35°19'42", long 80°54'35", Mecklenburg County, Hydrologic Unit 03050101, on left bank at upstream side of bridge on Secondary Road 2042, 600 ft downstream from McIntyre Creek, 1.2 mi upstream from Gutter Branch, and 3.6 mi north of community of Paw Creek.

DRAINAGE AREA.--16.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1965 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 648.7 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Comuunity Development.

AVERAGE DISCHARGE.--20 years, 18.1 ft^3/s, 14.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,300 ft^3/s June 18, 1982, gage height, 11.70 ft; minimum, 0.42 ft^3/s Sept. 27, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 4	1145	625	6.77	Feb. 2	0245	924	8.23
Feb. 1	0400	888	8.12	May 16	0215	*1,390	*9.33

Minimum discharge, 0.42 ft^3/s Sept. 27, gage height, 0.87 ft; minimum daily, 0.88 ft^3/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	3.1	3.3	3.7	312	19	7.3	7.1	5.5	e5.0	7.2	3.0
2	3.0	3.3	4.8	5.4	346	15	6.8	11	11	e8.0	6.0	2.5
3	2.5	3.1	35	52	45	13	6.6	61	19	2.7	4.0	2.5
4	2.4	9.9	6.7	179	26	12	6.4	12	8.7	2.0	3.5	2.4
5	2.3	5.4	40	39	35	12	6.3	8.6	7.0	1.8	3.1	2.0
6	2.4	3.5	28	16	44	9.9	10	7.3	36	1.8	2.7	2.2
7	2.4	2.9	8.1	11	43	9.5	6.9	6.5	99	3.6	3.0	2.2
8	2.4	2.8	6.1	8.7	33	9.6	6.2	6.5	85	1.8	3.1	2.3
9	2.2	2.8	5.4	7.8	24	9.6	5.9	6.8	21	1.5	3.1	2.3
10	2.1	2.8	5.1	7.0	18	9.3	5.7	10	15	1.5	2.9	2.0
11	2.1	5.6	4.9	6.7	18	8.9	5.8	21	e7.0	1.4	2.4	2.3
12	2.4	3.4	4.6	6.2	76	9.2	5.7	19	e6.0	1.7	2.2	2.1
13	2.5	2.9	4.4	5.9	37	8.5	5.8	8.7	e5.4	3.2	1.8	1.9
14	2.5	2.8	4.2	6.0	26	8.3	5.6	7.2	e5.0	3.1	1.9	2.0
15	2.4	2.8	4.1	5.8	17	8.1	6.2	29	e10	1.4	1.8	2.1
16	2.4	2.7	4.1	6.1	14	8.0	17	380	e35	5.3	2.0	1.9
17	2.5	2.7	4.2	8.6	12	8.0	12	106	e15	1.3	172	2.1
18	2.6	2.7	4.2	7.8	11	7.7	7.4	33	e6.0	.97	36	1.8
19	2.5	2.9	4.2	6.9	11	7.5	6.5	15	e4.5	.90	13	1.9
20	3.1	2.8	4.1	6.5	12	7.5	5.9	10	e3.8	.89	9.5	1.4
21	15	2.7	3.9	6.3	10	7.5	5.5	9.0	e3.6	.88	14	1.7
22	4.5	2.7	4.9	6.4	9.9	22	4.9	8.2	e3.5	2.8	8.1	1.7
23	3.7	2.7	4.3	6.4	9.9	17	4.7	7.6	e3.3	3.4	4.3	1.4
24	3.3	2.8	3.9	6.4	9.9	11	5.7	7.5	e15	2.8	20	1.4
25	3.2	2.8	3.9	6.5	13	9.2	11	7.3	e8.0	17	19	1.4
26	3.1	2.8	3.6	7.1	134	8.5	5.6	6.6	e6.0	15	11	1.3
27	3.0	2.8	3.7	7.1	39	8.3	5.0	5.2	e3.5	32	8.4	1.1
28	3.1	11	3.7	7.2	28	8.0	6.1	4.9	e3.0	18	5.6	1.3
29	3.1	5.1	3.8	7.5	---	7.9	7.9	6.5	e10	21	4.5	1.5
30	3.0	3.5	3.8	6.9	---	7.9	7.5	5.0	e9.0	15	3.7	1.4
31	3.0	---	3.7	30	---	7.5	---	4.8	---	12	5.2	---
TOTAL	109.7	109.8	228.7	493.9	1413.7	315.4	209.9	838.3	469.8	189.74	385.0	57.1
MEAN	3.54	3.66	7.38	15.9	50.5	10.2	7.00	27.0	15.7	6.12	12.4	1.90
MAX	15	11	40	179	346	22	17	380	99	32	172	3.0
MIN	2.1	2.7	3.3	3.7	9.9	7.5	4.7	4.8	3.0	.88	1.8	1.1
CFSM	.22	.22	.45	.97	3.08	.62	.43	1.65	.96	.37	.76	.12
IN.	.25	.25	.52	1.12	3.21	.72	.48	1.90	1.07	.43	.87	.13

CAL YR 1984	TOTAL	6920.4	MEAN	18.9	MAX	393	MIN	1.9	CFSM	1.15	IN.	15.70
WTR YR 1985	TOTAL	4821.04	MEAN	13.2	MAX	380	MIN	.88	CFSM	.80	IN.	10.94

e Estimated

02142900 LONG CREEK NEAR PAW CREEK, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/24	1020	WATER	0	1.44	6	114	7.20	2.0		13.2	390
85/02/12	1015	WATER	0	2.24	66	77	6.50	5.0	190.0	12.0	910
85/03/05	1030	WATER	0	1.53	11	105	7.30	14.0		10.7	190
85/04/03	1020	WATER	0	1.44	6	129	7.10	12.0		11.2	30
85/05/07	1140	WATER	0	1.45	6	139	7.30	17.0	12.0	8.3	120
85/06/06	1000	WATER	0	1.49	9	95	7.00	22.0		6.3	28000
85/07/09	1015	WATER	0	1.01	1	152	7.10	22.0		7.6	75
85/08/05	1050	WATER	0.1	1.10	3	167	7.20	19.0	9.9	7.8	160
85/09/09	1025	WATER	0.1	1.02	2	185	7.00	24.0		7.9	210

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/24	1020	WATER	0	60	2	120	.47	.300	.400	.140	.080
85/02/12	1015	WATER	0	14	120	290	.31	.070	.600	.210	.030
85/03/05	1030	WATER	0	46	13	140	.35	.090	.200	.100	.040
85/04/03	1020	WATER	0	64	3	130	.31	.090	.400	.130	.060
85/05/07	1140	WATER	0	61	16	200	.65	.070	.300	.150	.060
85/06/06	1000	WATER	0	38	350	560	.68	.210	.800	.520	.100
85/07/09	1015	WATER	0	77	11	180	.88	.040	.300	.280	.220
85/08/05	1050	WATER	0.1	81	12	210	.95	.050	.500	.220	.140
85/09/09	1025	WATER	0.1	84	5	200	.98	.040	.300	.210	.170

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/12	1015	WATER	0	10K	20K	50K	40	100K	.2K	100K	30
85/05/07	1140	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/05	1050	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02143000 HENRY FORK NEAR HENRY RIVER, NC

LOCATION.--Lat 35°41'03", long 81°24'10", Catawba County, Hydrologic Unit 03050102, on left bank 325 ft downstream from bridge on Secondary Road 1124, at site of Old Link Ford, 1.2 mi downstream from Burke-Catawba County line, and 2 mi southeast of village of Henry River.

DRAINAGE AREA.--83.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to November 1931, December 1941 to current year.

REVISED RECORDS.--WSP 952: 1928, 1930. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 891.0 ft above National Geodetic Vertical Datum of 1929. July 1925 to November 1931, at site 450 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Some regulation at times during the year following activities of upsteam mill. An average of 2.0 ft³/s was diverted for water supply by city of Morganton and wasted into Catawba River.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--49 years (1925-31, 1942-85), 134 ft³/s, 21.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft³/s Oct. 2, 1929 gage height, 18.40 ft, site then in use, from rating curve extended above 2,300 ft³/s on basis of computation of peak flow over dam at Henry River, at gage height 29.2 ft; minimum, 3 ft³/s Dec. 20, 1942; minimum daily, 4 ft³/s Nov. 15, Dec. 20, 1942, result of regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 29.2 ft Aug. 13, 1940 at former site, from floodmarks, discharge, 31,300 ft³/s. The flood of July 16, 1916 reached a stage of about 23 ft at former site, discharge, 20,700 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	1800	*1,910	*5.48				

Minimum discharge, 13 ft³/s June 21, 22, gage height, 0.74 ft, result of regulation; minimum daily, 14 ft³/s June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	65	69	56	374	92	23	56	45	55	108	106
2	77	63	66	62	618	88	39	68	45	51	92	72
3	68	61	82	197	307	84	59	64	57	44	73	60
4	66	69	70	344	178	80	61	36	48	41	63	76
5	65	81	93	217	140	78	59	34	99	43	57	91
6	65	67	137	134	133	74	80	52	83	41	58	60
7	64	62	98	106	131	72	66	51	127	40	58	27
8	66	60	84	92	117	71	61	52	141	36	71	68
9	66	60	76	83	107	72	59	53	74	33	69	89
10	64	60	72	76	99	70	59	36	57	32	57	196
11	63	85	70	73	104	68	59	68	56	30	53	60
12	62	72	67	70	632	68	59	66	65	29	93	20
13	60	64	65	75	282	66	58	89	51	55	42	19
14	59	62	64	78	328	66	61	65	46	52	60	20
15	59	61	62	65	145	64	88	58	60	39	41	22
16	59	60	61	84	122	63	167	92	67	48	33	44
17	58	59	60	71	109	64	160	80	65	37	626	48
18	59	60	60	69	100	62	119	64	63	32	449	47
19	59	63	59	65	94	61	97	54	60	30	163	47
20	58	62	59	63	91	61	85	51	54	28	107	46
21	60	59	59	79	86	61	77	49	80	43	86	45
22	95	59	61	76	83	95	71	49	14	74	74	44
23	79	59	61	76	81	110	67	48	17	104	72	44
24	72	60	57	77	79	88	69	52	18	65	61	61
25	70	59	57	78	83	78	79	53	19	240	220	93
26	63	59	55	70	120	72	66	49	20	576	233	62
27	61	59	56	68	111	69	63	46	20	679	198	67
28	63	138	57	79	99	69	65	44	24	253	147	39
29	80	121	57	78	----	52	61	46	20	165	148	29
30	76	80	57	73	----	19	57	46	71	121	165	49
31	71	----	56	68	----	33	----	48	----	160	166	----
TOTAL	2113	2049	2107	2922	4945	2160	2194	1770	1674	3276	3943	1751
MEAN	68.2	68.3	68.0	94.3	177	69.7	73.1	57.1	55.8	106	127	58.4
MAX	126	138	137	344	632	110	167	92	141	679	626	196
MIN	58	59	55	56	79	19	23	44	14	28	33	19
CFSM	.82	.82	.82	1.13	2.13	.84	.88	.69	.67	1.27	1.53	.70
IN.	.94	.92	.94	1.31	2.21	.97	.98	.79	.75	1.46	1.76	.78

CAL YR 1984 TOTAL 65840 MEAN 180 MAX 2370 MIN 55 CFSM 2.16 IN. 29.44
WTR YR 1985 TOTAL 30904 MEAN 84.7 MAX 679 MIN 14 CFSM 1.02 IN. 13.82

02143000 HENRY FORK NEAR HENRY RIVER, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/01	1220	WATER	0	1.58	122	39	6.40	13.0		9.7	2100
84/11/01	1150	WATER	0	1.31	65	35	6.20	19.0	13.0	10.2	200
84/12/03	1250	WATER	0	1.43	84	39	6.60	8.0		11.7	270
85/01/15	1155	WATER	0	1.29	65	41	6.40	1.0		12.8	30
85/02/04	1215	WATER	0	1.78	169	52	6.40	5.0	34.0	12.4	40
85/03/04	1155	WATER	0	1.37	80	51	6.80	10.0		11.2	10K
85/04/02	1200	WATER	0	1.06	37	40	6.50	13.0		10.3	60
85/05/02	1215	WATER	0	1.20	56	36	6.50	18.0	4.9	8.4	60
85/06/05	1200	WATER	0	1.41	95	38	6.60	23.0		8.0	110
85/07/08	1145	WATER	0	1.04	34	60	6.60	21.0		9.0	10
85/08/01	1200	WATER	0.1	1.52	107	44	6.30	22.0	30.0	7.7	1100
85/09/04	1130	WATER	0.1	.98	31	54	6.10	22.0		8.2	120

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/01	1220	WATER	0	7	150	210					
84/11/01	1150	WATER	0	9	44	54	.10	.030	.100	.040	.010
84/12/03	1250	WATER	0	7	26	62					
85/01/15	1155	WATER	0	8	10	51					
85/02/04	1215	WATER	0	7	64	92	.21	.040	.200	.060	.010K
85/03/04	1155	WATER	0	7	12	64					
85/04/02	1200	WATER	0	9	3	41					
85/05/02	1215	WATER	0	10	9	50	.07	.020	.300	.140	.010K
85/06/05	1200	WATER	0	10	13	110					
85/07/08	1145	WATER	0	11	5	32					
85/08/01	1200	WATER	0.1	9	17	78	.19	.010	.200	.040	.010K
85/09/04	1130	WATER	0.1	11	2	79					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/01	1150	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/04	1215	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/02	1215	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/01	1200	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02143040 JACOB FORK AT RAMSEY, NC

LOCATION.--Lat 35°35'26", long 81°34'02", Burke County, Hydrologic Unit 03050102, on left bank 16 ft downstream from bridge on Secondary Road 1924, 0.6 mi downstream from Queens Creek, and 0.6 mi north of Ramsey.

DRAINAGE AREA.--25.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-61. October 1961 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,103.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--24 years, 50.8 ft³/s, 26.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,220 ft³/s Oct. 17, 1975, gage height, 19.74 ft, from rating curve extended above 3,400 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 7.3 ft³/s July 28, 29, 1966; minimum gage height, 1.58 ft Sept. 3, 4, 5, 6, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1940 reached a stage of about 39 ft, from information by local resident. Flood of July 1916 reached a stage of about 19 ft, from information by North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 21	1800	842	5.62	July 26	2230	1,590	8.71
July 25	2400	*2,190	*10.84	Aug. 17	1700	994	6.22

Minimum discharge, 7.7 ft³/s July 12, gage height, 1.62 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	23	25	20	238	37	30	26	18	13	49	45
2	24	22	24	25	251	35	28	29	19	14	41	40
3	23	20	31	137	112	32	28	29	20	12	34	36
4	22	25	27	175	63	31	27	26	17	13	30	33
5	21	28	41	94	53	30	28	25	15	14	28	31
6	22	22	46	52	52	28	36	23	15	12	29	30
7	22	21	38	42	54	28	29	22	22	12	27	29
8	24	19	32	36	48	28	28	24	24	10	30	28
9	22	19	30	31	43	28	28	25	17	9.1	27	29
10	22	20	29	28	38	27	28	26	14	8.9	24	29
11	22	28	28	28	53	27	28	33	14	8.9	26	33
12	22	22	26	26	249	27	28	27	16	e8.5	28	36
13	21	20	25	25	92	26	28	27	14	16	23	28
14	21	19	23	24	58	27	29	22	13	11	21	26
15	20	19	22	23	48	26	69	22	12	17	20	26
16	20	19	22	23	42	26	141	26	13	19	19	24
17	21	18	22	25	39	26	99	26	12	12	277	23
18	21	18	21	24	36	25	62	22	12	11	176	23
19	20	21	21	23	35	25	48	20	11	9.7	63	22
20	20	20	20	23	33	25	42	18	11	9.7	42	23
21	21	18	20	e22	31	26	38	18	10	158	35	23
22	40	18	23	e20	30	39	35	18	10	77	38	23
23	26	18	21	e20	30	39	32	18	9.9	53	28	22
24	28	18	20	e20	29	34	35	20	10	98	34	23
25	24	18	19	e19	33	31	36	20	13	365	165	22
26	22	18	19	e18	55	29	31	18	10	649	132	23
27	21	18	19	e18	48	28	30	16	9.4	309	97	23
28	24	80	19	21	41	28	30	15	9.0	101	84	22
29	41	43	19	21	---	28	28	16	10	78	61	22
30	42	29	20	21	---	28	26	31	16	63	78	23
31	26	---	20	37	---	30	---	20	---	61	57	---
TOTAL	765	701	772	1121	1934	904	1105	708	416.3	2252.8	1815	820
MEAN	24.7	23.4	24.9	36.2	69.1	29.2	39.5	22.8	13.9	72.7	58.5	27.3
MAX	42	80	46	175	251	39	141	33	24	649	277	45
MIN	20	18	19	18	29	25	26	15	9.0	8.5	19	22
CFSM	.96	.91	.97	1.41	2.69	1.14	1.54	.89	.54	2.83	2.28	1.06
IN.	1.11	1.01	1.12	1.62	2.80	1.31	1.72	1.02	.60	3.26	2.63	1.19

CAL YR 1984	TOTAL	22031	MEAN	60.2	MAX	555	MIN	18	CFSM	2.34	IN.	31.89
WTR YR 1985	TOTAL	13394.1	MEAN	36.7	MAX	649	MIN	8.5	CFSM	1.43	IN.	19.39

e Estimated

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/01	1330	WATER	0	1.99	34	32	6.40	13.0		9.4	310
84/11/01	1325	WATER	0	1.90	20	39	6.20	17.0	2.7	10.9	110
84/12/03	1125	WATER	0	2.00	30	26	6.80	9.0		12.2	30
85/01/15	1315	WATER	0	1.89	22	37	6.40	1.0		12.4	40
85/02/04	1335	WATER	0	2.26	63	48	6.20	4.0	2.5	13.4	10K
85/03/04	1315	WATER	0			40	6.50	9.0		11.5	60
85/04/02	1305	WATER	0	1.88	28	37	6.30	11.0		10.4	10
85/05/02	1340	WATER	0	1.91	31	29	6.40	16.0	2.7	8.4	160
85/06/05	1300	WATER	0	1.75	15	30	6.60	21.0		7.4	50
85/07/08	1255	WATER	0	1.68	10	37	6.70	20.0		8.8	30
85/08/01	1300	WATER	0.1	2.10	40	38	6.20	19.0	4.4	8.4	90
85/09/04	1255	WATER	0.1	1.93	33	48	6.10	19.0		8.2	100

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/01	1330	WATER	0	6	3	59					
84/11/01	1325	WATER	0	8	2	33	.03	.020	.300	.020	.010
84/12/03	1125	WATER	0	8	2	28					
85/01/15	1315	WATER	0	7	1K	39					
85/02/04	1335	WATER	0	5	1	17	.08	.010K	.100	.010	.010K
85/03/04	1315	WATER	0	5	1K	46					
85/04/02	1305	WATER	0	8	2	33					
85/05/02	1340	WATER	0	9	2	52	.07	.020	.300	.140	.010K
85/06/05	1300	WATER	0	10	2	110					
85/07/08	1255	WATER	0	12	1	33					
85/08/01	1300	WATER	0.1	7	6	63	.08	.020	.200	.010	.010K
85/09/04	1255	WATER	0.1	10	1	63					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/01	1325	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/04	1335	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/02	1340	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/08/01	1300	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02143500 INDIAN CREEK NEAR LABORATORY, NC

LOCATION.--Lat 35°25'20", long 81°15'52", Lincoln County, Hydrologic Unit 03050102, on left bank 250 ft upstream from remains of Rudisill Mill dam, 0.5 mi upstream from bridge on Secondary Road 1252, 1.5 mi upstream from mouth, 1.5 mi south of Laboratory, and 3.5 mi south of Lincolnton.

DRAINAGE AREA.--69.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WDR NC-71-1: 1970(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 736 ft, by barometer.

REMARKS.--No estimated daily discharges. Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--34 years, 90.2 ft³/s, 17.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft³/s Aug. 10, 1970, gage height, 10.61 ft; minimum, 4.6 ft³/s Oct. 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peak discharge of flood in October 1929 was 9,920 ft³/s; flood in July 1916, 7,840 ft³/s; flood in August 1940, 6,000 ft³/s. Discharge based on computation of peak flow over dam 1 mi downstream, using floodmarks and information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0330	*1,100	*4.08				

Minimum discharge, 12 ft³/s July 19, 20, gage height, 0.71 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	70	48	45	904	97	58	40	29	28	32	30
2	40	60	48	48	565	91	54	41	26	30	29	28
3	34	53	109	170	239	86	53	58	30	26	25	27
4	34	54	65	401	168	84	53	43	27	20	23	27
5	34	62	134	208	176	83	52	40	29	27	21	26
6	33	56	185	128	211	74	75	38	67	23	23	26
7	36	50	99	102	174	67	60	40	59	29	30	23
8	37	50	79	86	129	66	51	40	115	24	32	21
9	36	49	69	74	113	67	52	43	42	21	31	23
10	36	50	64	70	104	66	51	43	34	15	22	28
11	36	57	61	66	105	64	52	47	28	20	20	20
12	35	52	56	63	287	64	52	45	28	20	20	21
13	34	45	57	62	171	61	51	48	26	28	20	22
14	35	45	52	61	132	60	53	42	24	23	18	18
15	33	46	51	59	112	59	58	38	24	19	17	18
16	34	47	49	57	96	59	64	129	27	25	16	19
17	35	45	49	65	91	60	53	108	28	25	348	19
18	36	44	49	66	85	57	49	63	23	21	341	18
19	36	46	46	63	84	56	49	45	22	14	90	18
20	35	43	48	61	88	55	45	40	22	13	57	17
21	36	42	44	56	78	55	44	38	21	14	48	16
22	178	41	51	56	76	90	43	36	20	13	39	17
23	73	43	49	57	78	87	40	35	20	24	34	17
24	219	42	44	54	77	75	44	34	21	26	41	18
25	95	43	44	54	81	62	68	35	21	65	69	20
26	64	42	45	50	205	58	43	35	20	50	58	18
27	54	41	45	49	143	60	40	31	18	34	46	17
28	52	85	44	54	112	58	43	30	17	132	39	15
29	119	77	48	54	---	59	40	30	23	58	40	15
30	133	56	46	53	---	58	39	28	35	37	35	15
31	81	---	45	103	---	59	---	30	---	39	36	---
TOTAL	1840	1536	1923	2595	4884	2097	1529	1393	926	943	1700	617
MEAN	59.4	51.2	62.0	83.7	174	67.6	51.0	44.9	30.9	30.4	54.8	20.6
MAX	219	85	185	401	904	97	75	129	115	132	348	30
MIN	33	41	44	45	76	55	39	28	17	13	16	15
CFSM	.86	.74	.90	1.21	2.51	.98	.74	.65	.45	.44	.79	.30
IN.	.99	.83	1.03	1.39	2.63	1.13	.82	.75	.50	.51	.91	.33

CAL YR 1984	TOTAL	42113	MEAN	115	MAX	1680	MIN	26	CFSM 1.66	IN.	22.64
WTR YR 1985	TOTAL	21983	MEAN	60.2	MAX	904	MIN	13	CFSM .87	IN.	11.82

SANTEE RIVER RIVER BASIN

02143500 INDIAN CREEK NEAR LABORATORY, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/09	1235	WATER	0	.95	37	95	6.90	17.0		9.6	350
84/11/06	1235	WATER	0	1.03	55	87	6.10	13.0	10.0	11.6	1100
84/12/07	1345	WATER	0	1.19	92	70	6.50	4.0		11.5	520
85/01/17	1200	WATER	0	1.09	67	72	6.80	4.0		11.2	170
85/02/12	1220	WATER	0	1.95	319	89	6.50	6.0	320.0	11.8	7500
85/03/05	1230	WATER	0	1.15	84	75	6.90	14.0		11.3	230
85/04/03	1300	WATER	0	1.03	53	85	6.90	12.0		12.4	100
85/05/07	1400	WATER	0	.97	42	93	6.70	18.0	10.0	9.6	770
85/06/06	1240	WATER	0	.99	49	35	6.60	22.0		7.4	71000
85/07/09	1235	WATER	0	.81	22	75	6.80	22.0		9.0	850
85/08/05	1250	WATER	0.1	.80	19	106	6.70	20.0	13.0	8.2	500
85/09/09	1230	WATER	0.1	.83	23	120	6.30	23.0		8.0	760

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/09	1235	WATER	0	19	9	81					
84/11/06	1235	WATER	0	19	11	90	.82	.050	.400	.200	.090
84/12/07	1345	WATER	0	18	11	95					
85/01/17	1200	WATER	0	21	3	110	.66	.080	.200	.140	.060
85/02/12	1220	WATER	0	15	240	340	.73	.380	1.100	.490	.050
85/03/05	1230	WATER	0	18	8	97	.75	.060	.200	.110	.040
85/04/03	1300	WATER	0	21	7	90	.67	.040	.200	.170	.090
85/05/07	1400	WATER	0	21	19	120	.93	.100	.500	.280	.120
85/06/06	1240	WATER	0	15	830	960	1.30	.230	1.300	.980	.040
85/07/09	1235	WATER	0	24	16	110	1.70	.060	.400	.380	.230
85/08/05	1250	WATER	0.1	28	12	270	.69	.070	.300	.180	.060
85/09/09	1230	WATER	0.1	28	10	150	.80	.060	.400	.230	.100

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/06	1235	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/12	1220	WATER	0	10K	20K	50K	20K	100K	.2K	100K	30
85/05/07	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/05	1250	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02144000 LONG CREEK NEAR BESSEMER CITY, NC

LOCATION.--Lat 35°18'23", long 81°14'05", Gaston County, Hydrologic Unit 03050102, on right bank 700 ft upstream from bridge on Secondary Road 1456, 3.3 mi northeast of Bessemer City, and 8.2 mi upstream from mouth.

DRAINAGE AREA.--31.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year. Monthly discharge only for some periods, published in WSP 1723.

REVISED RECORDS.--WSP 1723: 1959-60 (M). WSP 1904: 1959-60. WRD NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.1 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Bessemer City diverts water supply from above gaging station and returns waste water to South Fork Catawba River below mouth of Long Creek, causing some diurnal fluctuation; an average of 1.5 ft³/s was diverted during the year.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--33 years, 35.6 ft³/s, 15.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s Oct. 16, 1971, gage height, 9.10 ft, from rating curve extended above 2,400 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 0.4 ft³/s Oct. 7, 1954; minimum daily, 0.8 ft³/s Oct. 7, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 26 ft at site on left bank 1,500 ft upstream, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0100	833	4.96	Aug. 17	1930	*2,920	*7.97

Minimum discharge, 3.2 ft³/s, July 22, gage height, 0.94 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	11	13	12	409	34	19	12	11	8.2	7.8	13
2	11	11	14	14	249	31	17	15	10	9.1	8.1	11
3	11	10	34	55	78	28	16	39	10	6.8	6.7	11
4	10	12	16	146	49	26	16	17	9.8	6.1	5.7	11
5	9.9	13	47	57	64	26	17	15	15	5.8	5.0	9.5
6	9.6	12	45	34	68	24	24	13	21	5.6	5.4	9.2
7	9.3	12	22	28	53	24	18	13	132	7.2	5.9	11
8	9.7	11	18	23	39	24	17	13	82	5.7	6.8	9.5
9	9.9	10	16	20	34	24	16	14	26	5.1	6.1	9.0
10	9.9	11	16	19	30	22	15	19	18	5.0	5.2	8.7
11	9.6	14	15	19	35	22	15	22	15	12	4.7	8.1
12	9.3	11	14	17	108	22	15	20	13	6.5	4.7	8.5
13	9.1	11	15	16	49	20	15	14	9.2	15	4.5	8.4
14	9.0	11	15	16	37	21	16	13	8.8	8.9	4.2	8.1
15	8.2	10	15	15	33	20	18	18	8.7	6.3	4.0	7.9
16	8.2	10	15	14	30	20	47	56	13	5.5	8.6	7.7
17	7.7	11	15	18	28	21	36	62	11	5.3	1470	7.2
18	8.2	11	14	17	26	19	22	30	8.5	5.8	640	6.4
19	8.1	10	14	15	26	19	18	21	9.3	4.7	57	6.6
20	7.8	10	15	15	29	19	16	18	6.9	4.3	34	6.5
21	8.2	9.8	15	13	26	19	14	15	6.3	3.7	38	7.2
22	36	9.8	15	13	25	34	16	14	6.5	4.1	23	7.7
23	14	9.9	13	14	25	32	14	14	7.3	4.9	18	7.3
24	18	10	13	14	25	25	20	13	6.4	10	32	7.2
25	13	11	13	14	28	22	34	14	7.3	29	32	8.1
26	12	11	13	14	111	20	18	13	16	20	22	6.8
27	11	11	14	13	52	20	16	12	8.0	9.9	18	7.7
28	10	26	12	15	38	20	14	12	6.5	18	15	6.9
29	11	18	13	16	---	21	13	13	5.9	10	14	5.9
30	11	13	13	15	---	20	13	12	7.1	9.3	13	5.7
31	11	---	12	48	---	20	---	12	---	8.3	14	---
TOTAL	354.7	351.5	534	759	1804	719	563	588	515.5	266.1	2533.4	248.8
MEAN	11.4	11.7	17.2	24.5	64.4	23.2	18.8	19.0	17.2	8.58	81.7	8.29
MAX	36	26	47	146	409	34	47	62	132	29	1470	13
MIN	7.7	9.8	12	12	25	19	13	12	5.9	3.7	4.0	5.7
CFSM	.36	.37	.54	.77	2.03	.73	.59	.60	.54	.27	2.57	.26
IN.	.41	.41	.62	.89	2.11	.84	.66	.69	.60	.31	2.96	.29

CAL YR 1984 TOTAL 14275.9 MEAN 39.0 MAX 920 MIN 6.7 CFSM 1.23 IN. 16.70
WTR YR 1985 TOTAL 9237.8 MEAN 25.3 MAX 1470 MIN 3.7 CFSM .80 IN. 10.81

02144000 LONG CREEK NEAR BESSEMER CITY, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/10	1340	WATER	0	1.27	10	87	6.90	24.0		6.8	420
84/11/13	1415	WATER	0	1.36	11	66	6.60	7.0	6.0	11.8	270
84/12/04	1400	WATER	0	1.55	16	74	6.90	7.0		11.6	2300
85/01/22	1500	WATER	0	1.47	13	80	6.30	1.0		13.8	370
85/02/06	1430	WATER	0	2.26	.6	100	6.50	5.0	60.0	11.2	28000
85/03/19	1350	WATER	0	1.63	19	67	6.00	9.0		13.4	320
85/04/10	1330	WATER	0	1.53	15	49	6.00	10.0		13.0	340
85/05/08	1410	WATER	0	1.41	13	804	6.00	17.0	15.0	7.4	1600
85/06/10	1400	WATER	0	1.39	18	150	7.00	22.0		6.2	1400
85/07/10	1330	WATER	0	1.05	5	104	6.70	22.0		6.5	700
85/08/06	1350	WATER	0.1	1.07	6	100	6.90	20.0	20.0	5.8	510
85/09/11	1310	WATER	0.1	1.00	4	130	6.10	23.0		5.6	270

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/10	1340	WATER	0	34	15	130					
84/11/13	1415	WATER	0	29	4	71	.28	.030	.400	.050	.010
84/12/04	1400	WATER	[illegible]	24	9	69					
85/01/22	1500	WATER	[illegible]	34	3	62	.92	.160	.300	.050	.020
85/02/06	1430	WATER	0	21	25	120	.89	.170	.500	.190	.060
85/03/19	1350	WATER	0	29	3	85	.44	.010	.100	.030	.010
85/04/10	1330	WATER	0	30	6	120	.23	.050	.300	.030	.010K
85/05/08	1410	WATER	0	25	19	110	.52	.130	.300	.130	.010
85/06/10	1400	WATER	0	36	29	190	1.40	.140	.400	.140	.010
85/07/10	1330	WATER	0	34	15	140	.52	.050	.300	.080	.020
85/08/06	1350	WATER	0.1	36	14	100	.50	.050	.300	.100	.010
85/09/11	1310	WATER	0.1	42	8	150	.63	.090	.300	.090	.030

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/13	1415	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/06	1430	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/08	1410	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/06	1350	WATER	0.1	10K	20K	50K	20K	100K	.2	100K	20K

K Less than noted value.

02145000 SOUTH FORK CATAWBA RIVER AT LOWELL, NC

LOCATION.--Lat 35°17'10", long 81°06'00", Gaston County, Hydrologic Unit 03050102, on right bank 50 ft north of private mill road, 120 ft downstream from Hoosers Creek, 1.0 mi north of Lowell, 2.5 mi upstream from bridge on Interstate Highway 85, and 3.0 miles downstream from Long Creek.

DRAINAGE AREA.--628 mi².

PERIOD OF RECORD.--January 1942 to September 1971, October 1983 to current year.

REVISED RECORDS.--WSP 1082: 1943(M). WSP 1303: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 603.10 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Considerable diurnal fluctuation and slight regulation for short periods at low flow caused by powerplant above station. City of Gastonia diverted for water supply an average of 14.6 ft³/s from Long Creek and 14.0 ft³/s from South Fork Catawba River. A part of the diversion is returned to Long Creek as sewage. For diversion by town of Morganton see Henry Fork near Henry River, and by Bessemer City see Long Creek near Bessemer City. Several measurements of water temperatures were made during the year.

AVERAGE DISCHARGE.--31 years (water years 1943-71, 1984-1985) 798 ft³/s, 17.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,800 ft³/s Aug. 11, 1970 gage height, 17.38 ft; minimum, 25 ft³/s Sept. 27, Oct. 4, 1954 gage height, 0.75 ft; minimum daily 31 ft³/s Oct. 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 15, 1940 reached a stage of 21.33 ft, from floodmarks (discharge, 34,000 ft³/s). Depth of flow over dam during the July 1916 flood at High Shoals 11 miles upstream was about 1 ft higher than that for August 1940, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 18	0500	*7,700	*9.94				

Minimum discharge, 36 ft³/s July 12, gage height 0.91 ft, result of regulation; minimum daily, 165 ft³/s July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	645	523	521	428	4620	801	488	384	317	456	724	712
2	575	485	474	407	4610	765	474	383	321	453	611	563
3	388	463	744	859	2840	717	442	563	298	340	536	506
4	362	451	609	2530	1710	671	463	460	314	302	431	398
5	338	469	738	2290	1250	650	470	416	321	324	382	476
6	357	515	1330	1290	1430	621	550	384	462	338	363	398
7	350	451	891	903	1290	598	561	358	562	317	353	413
8	340	430	703	750	1020	588	511	359	1580	268	452	418
9	349	403	639	654	894	596	465	380	727	203	475	337
10	356	419	556	612	813	598	459	390	460	237	349	413
11	346	467	533	602	769	585	454	e453	348	187	352	445
12	335	470	508	575	1850	577	461	e440	327	190	302	398
13	350	442	509	534	2070	557	462	e600	341	266	315	272
14	337	402	490	540	1440	542	466	e430	317	296	315	300
15	336	400	488	520	1130	534	482	e400	307	227	254	293
16	303	411	478	491	922	543	658	e620	303	291	269	247
17	328	405	447	529	825	541	773	e520	292	253	3460	264
18	316	409	455	544	759	531	682	e430	303	216	6500	290
19	340	397	452	537	717	504	605	e380	300	180	2990	269
20	347	396	460	514	727	508	541	e340	247	165	1300	272
21	343	396	451	421	685	502	499	e330	221	194	1360	248
22	850	385	469	375	640	602	469	e330	260	264	940	295
23	669	374	498	427	640	815	427	e320	282	615	594	268
24	780	392	462	460	645	722	453	e370	184	485	633	252
25	582	403	446	487	629	650	602	e340	211	599	976	269
26	471	360	421	461	1340	570	498	e320	275	1280	1060	293
27	438	383	431	436	1190	547	452	e310	224	2080	964	265
28	433	512	433	450	915	554	444	e300	183	2870	930	261
29	549	778	431	492	---	525	419	e296	203	2120	851	246
30	1240	662	426	473	---	545	401	303	457	1030	752	246
31	679	---	412	555	---	477	---	297	---	728	936	---
TOTAL	14432	13453	16905	21146	38370	18536	15131	12206	10947	17774	30729	10327
MEAN	466	448	545	682	1370	598	504	394	365	573	991	344
MAX	1240	778	1330	2530	4620	815	773	620	1580	2870	6500	712
MIN	303	360	412	375	629	477	401	296	183	165	254	246
CFSM	.74	.71	.87	1.09	2.18	.95	.80	.63	.58	.91	1.58	.55
IN.	.85	.80	1.00	1.25	2.27	1.10	.90	.72	.65	1.05	1.82	.61

CAL YR 1984 TOTAL 350041 MEAN 956 MAX 10200 MIN 247 CFSM 1.52 IN. 20.73
WTR YR 1985 TOTAL 219956 MEAN 603 MAX 6500 MIN 165 CFSM .96 IN. 13.03

e Estimated

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC

LOCATION.--Lat 35°15'43", long 80°50'15", Mecklenburg County, Hydrologic Unit 03050103, on right bank 50 ft upstream from bridge on Statesville Avenue (U. S. Highway 21) in Charlotte, 3.4 mi upstream from Stewart Creek, and 0.2 mi upstream from Kennedy Branch.

DRAINAGE AREA.--5.97 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969-77, 1970-80, October 1981 to current year.

REVISED RECORDS.--WDR NC-84-1: 1982.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 656.85 ft above National Geodetic Vertical Datum of 1929 (levels by city of Charlotte).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. A 140 acre solid waste landfill used 1940 to 1970 is located just above station. The drainage area is urbanized and has an impervious area of about 15 percent.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft³/s June 18, 1982, gage height, 7.58 ft; minimum, 0.25 ft³/s Oct. 7, 8, 1983, gage height, 0.28 ft; minimum daily, 0.28 ft³/s Oct. 7, 8, 1983.

EXTREMES FOR PERIOD.--Peak discharges greater than base discharge of 550 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 16	0045	877	5.43	Aug. 17	1130	609	4.26
May 17	0015	680	4.58	Aug. 24	1145	640	4.40
June 7	1945	*1,020	*6.01				

Minimum discharge, 0.56 ft³/s Sept. 28, 29; minimum daily, 0.61 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	1.1	1.4	e1.1	147	4.4	2.4	1.6	2.2	2.6	1.7	1.5
2	1.5	1.1	15	e8.0	116	3.7	2.3	5.1	2.1	13	1.5	1.4
3	1.3	.99	13	e30	13	3.2	2.2	42	4.1	3.9	1.2	1.4
4	1.2	7.0	2.5	e60	6.9	2.8	2.2	3.9	2.2	1.8	1.1	1.4
5	1.1	2.2	32	11	21	2.7	2.1	2.4	3.8	1.7	1.1	1.4
6	1.1	1.3	7.0	4.5	17	2.3	5.3	1.9	46	1.6	1.2	1.2
7	1.1	1.1	2.2	3.3	9.9	2.2	2.3	1.7	158	8.5	1.1	1.2
8	1.1	1.1	1.6	2.7	5.8	2.2	2.1	1.8	44	2.0	4.7	1.2
9	1.1	1.2	1.4	2.2	4.4	2.1	1.9	4.0	5.5	1.6	1.6	1.1
10	1.1	1.2	1.4	2.1	4.0	2.4	1.9	2.4	2.8	1.4	1.2	1.0
11	1.1	5.2	1.2	1.9	12	2.6	2.0	45	2.3	1.4	1.0	1.0
12	1.1	1.4	1.2	1.8	24	2.8	2.0	10	2.3	1.3	.97	1.0
13	1.2	1.2	1.1	1.7	7.8	2.8	1.9	3.5	1.9	1.5	.95	1.0
14	1.2	1.1	1.1	1.8	5.5	2.9	1.9	2.3	1.7	1.4	.89	.95
15	1.1	1.1	1.1	1.7	5.3	2.8	4.7	16	8.7	11	.86	.95
16	1.1	1.1	1.0	1.6	3.6	2.8	38	205	14	5.0	.87	.89
17	1.0	1.0	1.0	4.9	3.3	2.9	7.7	108	3.0	1.5	172	.90
18	1.1	1.0	1.0	2.4	3.1	2.7	3.4	10	2.0	1.2	16	.83
19	1.1	1.1	1.0	2.0	3.3	2.7	2.6	5.1	1.6	1.0	3.9	.82
20	1.8	.95	1.0	1.9	3.8	2.7	2.2	3.6	1.5	.98	2.4	.82
21	1.9	.86	1.0	1.5	3.1	2.9	2.0	2.9	1.4	1.8	18	.82
22	1.9	.93	1.5	1.5	2.9	7.9	1.8	2.7	1.4	3.4	2.5	.87
23	1.2	.93	1.1	1.6	2.8	4.3	1.7	2.6	1.4	1.8	1.8	.81
24	1.1	.94	e1.1	1.7	2.8	3.3	5.5	2.5	30	16	78	.86
25	1.1	.94	e1.1	1.8	21	2.8	3.7	2.5	5.9	11	13	.76
26	1.1	.94	e1.1	1.6	41	2.7	2.0	2.3	2.1	22	8.1	.65
27	1.1	.94	e1.1	1.5	9.9	2.7	1.8	2.3	1.6	9.8	3.8	.64
28	1.2	8.9	e1.1	2.4	5.6	2.7	1.8	2.3	1.5	6.2	2.5	.61
29	1.5	2.0	e1.1	2.3	---	2.7	1.6	2.5	2.3	3.2	2.0	.62
30	1.6	1.5	e1.1	1.8	---	2.5	1.6	2.5	3.1	2.2	3.2	.62
31	1.3	---	e1.1	40	---	2.5	---	2.4	---	2.4	1.9	---
TOTAL	42.8	52.32	100.6	204.3	505.8	92.7	114.6	502.8	360.4	144.18	351.04	29.22
MEAN	1.38	1.74	3.25	6.59	18.1	2.99	3.82	16.2	12.0	4.65	11.3	.97
MAX	5.4	8.9	32	60	147	7.9	38	205	158	22	172	1.5
MIN	1.0	.86	1.0	1.1	2.8	2.1	1.6	1.6	1.4	.98	.86	.61
CFSM	.23	.29	.54	1.10	3.03	.50	.64	2.71	2.01	.78	1.89	.16
IN.	.27	.33	.63	1.27	3.15	.58	.71	3.13	2.25	.90	2.19	.18

CAL YR 1984	TOTAL	3307.10	MEAN	9.04	MAX	200	MIN	.74	CFSM	1.51	IN. 20.61
WTR YR 1985	TOTAL	2500.76	MEAN	6.85	MAX	205	MIN	.61	CFSM	1.15	IN. 15.58

e Estimated

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1981, April 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1982 to current year.
WATER TEMPERATURE: April 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1982.

REMARKS.--Station operated as part of the Charlotte-Mecklenburg County Water-Quality Study. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemical samples were collected by the U.S. Geological Survey. Laboratory analyses, other than the organics, were performed by the Mecklenburg County Department of Environmental Health Laboratory. The analyses for the organics were performed by the U. S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 718 microsiemens Apr. 30, 1985; minimum recorded, 44 microsiemens Feb. 27, 1984.
WATER TEMPERATURE: Maximum recorded, 31.5°C July 11, 12, 1984; minimum, 0.0°C several days during January, 1985.

EXTREMES FOR CURRENT PERIOD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 718 microsiemens Apr. 30; minimum recorded, 62 microsiemens July 15.
WATER TEMPERATURE: Maximum recorded, 30.5°C July 18; minimum 0.0°C several days during January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)
NOV										
13...	1115	1.1	480	6.7	12.0	--	19	.9	170	11
JAN										
29...	1345	2.4	370	6.6	8.5	10.0	31	4.5	130	13
APR										
15...	0935	2.1	375	6.6	15.5	12.7	15	2.2	130	6.2
AUG										
26...	1000	5.5	441	6.8	23.5	--	--	--	--	--
27...	1045	2.8	430	6.8	22.0	6.8	19	4.5	110	24

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)
NOV										
13...	61	<.2	326	.70	.020	<.010	<1	1	<100	<100
JAN										
29...	54	<.2	258	.99	.050	.010	1	1	<100	<100
APR										
15...	42	<.2	225	.80	.030	.030	1	1	<100	<100
AUG										
26...	--	--	--	--	--	--	--	--	--	--
27...	49	<.2	270	1.6	.150	.060	1	1	<100	<100

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
NOV 13...	<1	<1	<1	<50	<50	1100	240	<1	2	800
JAN 29...	<1	2	<1	<50	<50	1500	170	5	1	520
APR 15...	<1	1	<1	<50	<50	820	200	<1	<1	570
AUG 26...	--	--	--	--	--	--	--	--	--	--
27...	<1	3	<1	<50	<50	1800	240	2	2	290

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 13...	830	<.2	<.2	<1	<1	<1	<1	<50	70
JAN 29...	550	<.2	<.2	<1	1	<1	<1	80	<50
APR 15...	540	<.2	<.2	<1	1	<1	<1	<50	<50
AUG 26...	--	--	--	--	--	--	--	--	--
27...	310	<.2	<.2	<1	2	<1	<1	390	<50

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	539	469	511	---	---	---	444	437	440
2	---	---	---	551	478	531	---	---	---	445	210	344
3	---	---	---	568	535	553	289	138	227	370	161	285
4	---	---	---	582	145	342	365	215	307	409	87	208
5	---	---	---	418	269	334	375	133	226	249	191	221
6	---	---	---	477	423	444	258	171	221	291	250	271
7	572	200	458	504	479	490	306	170	253	312	291	305
8	564	551	560	512	503	508	---	---	---	333	306	322
9	554	541	546	516	503	509	---	---	---	351	192	327
10	554	544	551	524	517	519	---	---	---	365	176	262
11	571	337	553	520	175	305	---	---	---	361	172	334
12	582	191	424	457	365	419	457	405	414	---	---	---
13	---	---	---	---	---	---	427	418	422	---	---	---
14	---	---	---	---	---	---	429	423	425	---	---	---
15	---	---	---	---	---	---	435	426	430	---	---	---
16	---	---	---	---	---	---	437	432	435	---	---	---
17	623	281	554	---	---	---	438	432	435	---	---	---
18	580	558	573	---	---	---	434	423	428	---	---	---
19	566	557	561	---	---	---	442	424	433	---	---	---
20	595	287	562	---	---	---	439	434	435	---	---	---
21	453	247	345	---	---	---	441	432	437	---	---	---
22	500	277	425	---	---	---	437	281	387	---	---	---
23	468	312	421	---	---	---	426	407	420	---	---	---
24	477	462	470	---	---	---	429	385	407	---	---	---
25	495	478	485	---	---	---	434	421	429	---	---	---
26	506	490	497	---	---	---	431	422	425	---	---	---
27	515	494	506	---	---	---	442	431	434	---	---	---
28	511	497	505	---	---	---	440	428	434	---	---	---
29	509	446	490	---	---	---	442	432	437	---	---	---
30	467	390	437	---	---	---	441	434	437	353	341	348
31	477	396	446	---	---	---	441	430	437	346	87	202
MONTH	623	191	494	582	145	455	457	133	391	445	87	298

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	154	81	122	324	286	304	357	254	345	650	580	607
2	187	83	129	358	320	335	360	237	344	679	641	664
3	231	173	205	402	343	370	360	345	351	687	111	224
4	262	235	249	392	325	365	363	343	350	302	224	261
5	271	124	188	386	332	353	371	350	358	347	306	323
6	203	158	182	519	365	402	356	199	328	372	349	357
7	238	181	211	423	381	403	386	354	369	395	377	384
8	269	241	255	387	367	378	416	344	381	399	387	395
9	300	271	287	368	358	362	417	339	383	391	190	348
10	318	297	308	401	362	382	373	225	354	345	246	310
11	330	115	295	401	383	393	372	329	354	364	89	281
12	201	127	162	427	363	396	366	328	348	238	146	198
13	252	203	230	381	364	370	355	324	341	315	241	279
14	280	245	264	379	360	367	360	333	346	359	318	339
15	292	243	255	377	357	367	359	137	297	388	95	342
16	328	293	315	377	261	355	411	79	162	221	102	174
17	331	321	326	369	275	358	219	127	183	283	158	225
18	337	327	333	365	351	360	329	221	274	274	247	259
19	341	324	335	370	256	356	478	315	371	311	275	291
20	336	290	315	373	254	351	529	318	500	347	314	330
21	336	315	328	362	331	357	498	427	469	392	297	372
22	346	335	340	307	187	236	497	394	458	417	394	406
23	350	343	346	288	245	268	481	376	442	431	420	427
24	349	342	345	322	292	304	651	492	557	447	424	434
25	344	107	301	339	320	330	608	576	590	434	397	412
26	190	114	151	357	332	347	640	606	618	427	401	410
27	256	194	228	351	244	337	683	647	662	421	405	414
28	291	253	270	351	333	344	691	661	677	426	408	419
29	---	---	---	352	329	344	717	680	695	423	384	402
30	---	---	---	353	342	349	718	526	643	420	388	405
31	---	---	---	360	341	351	---	---	---	420	411	417
MONTH	350	81	260	519	187	351	718	79	418	687	89	358

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	469	430	450	462	344	394	366	343	358	597	399	569
2	501	461	483	416	154	297	364	357	360	601	558	580
3	505	263	379	427	235	347	365	355	360	600	548	575
4	447	386	422	482	434	459	387	356	375	589	552	569
5	522	374	444	499	468	485	397	379	390	588	565	576
6	373	93	279	512	482	496	396	372	389	608	558	586
7	195	85	158	493	106	259	438	371	401	605	566	587
8	289	189	241	437	351	396	474	440	454	620	411	586
9	383	296	332	471	442	456	517	470	496	611	561	589
10	470	389	416	510	465	487	546	514	526	599	562	582
11	503	466	476	525	478	499	558	539	548	601	573	587
12	502	465	480	535	486	510	576	554	564	597	577	586
13	515	480	493	503	437	473	585	569	578	591	572	580
14	528	492	514	487	469	481	600	582	591	614	583	599
15	542	149	464	515	62	413	605	596	601	632	600	615
16	367	167	295	260	97	180	611	602	606	636	599	619
17	451	371	408	363	265	314	646	156	335	625	593	607
18	500	463	484	398	369	386	358	227	290	624	456	597
19	529	496	511	430	400	414	440	369	396	631	602	620
20	540	506	522	456	417	435	495	449	469	651	617	634
21	552	510	530	470	196	421	594	242	473	659	624	644
22	562	507	532	403	155	307	611	588	599	661	641	653
23	561	509	535	366	179	285	640	592	614	694	643	668
24	566	159	470	404	210	325	630	169	412	686	655	672
25	446	248	365	307	223	265	433	280	375	670	660	665
26	508	454	478	293	199	246	456	233	397	678	649	663
27	535	510	520	305	205	272	501	388	446	679	640	661
28	560	521	540	267	200	232	564	509	520	700	660	681
29	543	376	487	329	168	290	629	573	598	703	667	687
30	454	261	361	374	330	351	625	331	550	695	662	677
31	---	---	---	371	337	349	569	454	541	---	---	---
MONTH	566	85	436	535	62	372	646	156	471	703	399	617
YEAR	718	62	412									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	13.5	15.5	21.5	19.0	20.0	12.0	7.5	9.5	17.0	11.5	14.0
2	19.5	12.5	15.0	22.5	18.0	19.5	10.5	7.0	9.0	16.0	14.0	15.0
3	20.5	12.0	15.0	18.0	13.5	15.5	12.0	9.5	10.5	14.0	9.0	10.5
4	22.0	12.5	16.5	13.0	12.0	13.0	9.5	7.5	8.5	9.0	4.5	8.0
5	23.0	15.0	18.0	16.5	13.0	14.5	8.5	5.0	7.5	8.5	6.5	7.0
6	22.5	16.0	18.5	16.0	10.5	13.5	8.5	5.5	7.5	7.0	4.0	5.5
7	21.0	17.5	19.0	14.0	8.0	10.0	7.0	4.0	5.5	8.0	4.5	6.0
8	23.0	18.0	20.0	13.0	7.0	9.5	8.0	4.0	5.5	7.5	4.5	6.0
9	23.5	18.0	20.0	14.0	7.5	9.5	8.5	4.5	6.0	7.5	4.5	6.0
10	24.0	18.5	20.0	14.5	7.5	10.5	8.0	5.5	7.0	5.5	4.5	5.0
11	24.0	18.0	20.0	14.5	11.5	13.5	11.0	7.0	8.5	7.5	4.0	5.5
12	24.0	16.0	19.0	13.0	8.0	10.0	11.0	7.5	9.0	7.0	3.0	4.5
13	24.0	15.5	18.5	11.5	5.5	8.0	14.0	8.5	10.5	7.0	1.0	3.5
14	23.5	15.0	18.0	12.0	5.0	8.0	15.0	10.0	12.0	6.5	1.0	3.5
15	23.0	16.0	18.5	13.0	6.0	9.0	15.0	10.0	12.0	7.0	.0	3.5
16	23.5	17.0	19.5	14.5	8.5	11.5	14.0	10.5	12.0	6.5	.0	2.5
17	21.5	18.0	19.5	11.5	5.5	8.0	15.0	11.0	12.5	6.5	3.5	5.0
18	24.5	18.5	20.5	10.5	6.5	8.5	15.5	11.0	12.5	8.5	5.0	6.0
19	25.5	19.0	21.5	16.5	9.5	12.0	17.0	11.5	13.5	9.5	5.5	7.0
20	24.5	18.5	21.0	12.5	7.5	10.5	15.0	13.0	14.0	6.5	.0	4.0
21	26.0	21.0	22.5	8.5	5.5	7.0	16.5	13.5	14.5	3.0	.0	.5
22	23.5	21.5	22.0	9.5	4.5	6.0	16.5	12.5	15.0	3.0	.0	1.0
23	24.0	21.0	22.0	9.5	2.5	5.5	13.0	8.5	11.0	2.5	.0	.5
24	25.0	20.5	22.0	---	---	---	10.0	7.0	8.0	4.5	.0	1.5
25	24.0	20.0	21.5	---	---	---	14.0	9.5	11.0	6.5	.0	2.5
26	25.0	19.0	21.0	---	---	---	9.5	7.5	9.0	6.0	.0	1.5
27	22.0	16.5	19.0	13.0	7.5	10.5	14.0	9.5	11.0	3.0	.0	1.5
28	23.5	18.0	20.5	15.0	11.0	13.5	14.5	8.5	11.0	4.5	1.0	3.0
29	25.0	20.0	22.0	11.5	8.0	9.5	16.0	9.5	12.0	8.0	2.5	6.5
30	23.0	19.5	21.0	10.0	6.5	8.0	16.5	11.0	13.0	8.0	5.0	6.5
31	21.0	19.5	20.0	---	---	---	15.0	12.0	13.0	9.0	6.0	7.5
MONTH	26.0	12.0	19.5	22.5	2.5	11.0	17.0	4.0	10.5	17.0	.0	5.0

SANTEE RIVER BASIN

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.0	4.0	8.0	11.5	8.5	10.5	21.5	14.0	17.0	25.0	15.0	19.0
2	8.5	6.0	8.5	15.0	10.0	12.0	19.0	11.0	14.0	19.5	18.0	18.5
3	8.5	7.5	8.0	15.0	9.5	12.0	18.5	9.0	13.5	20.5	18.0	19.0
4	7.5	6.0	6.5	17.5	12.0	14.5	21.0	11.5	15.5	20.5	14.5	17.5
5	6.0	4.0	5.0	20.5	14.5	16.5	19.0	14.5	16.5	22.0	8.0	17.0
6	7.5	5.5	6.5	16.5	11.0	13.0	21.0	14.5	17.0	23.5	15.0	18.5
7	8.0	5.5	7.0	15.0	8.5	11.0	21.0	12.0	15.5	24.0	16.5	19.0
8	7.5	3.5	5.0	17.5	9.0	13.0	19.5	10.5	14.0	18.5	16.5	17.5
9	7.0	2.0	4.5	15.5	12.5	14.5	18.0	9.5	12.5	18.0	15.5	16.5
10	9.0	3.5	6.5	17.0	9.5	13.0	17.5	8.0	12.0	21.0	17.0	18.0
11	9.0	4.5	7.0	14.0	11.0	12.0	18.5	9.5	13.5	21.5	18.0	19.5
12	9.0	5.5	7.0	19.5	12.5	15.0	20.0	11.5	15.5	21.0	18.0	19.5
13	8.0	4.5	6.0	18.0	10.0	13.5	19.5	14.5	17.0	23.5	18.5	20.5
14	8.0	3.5	6.0	13.0	11.5	12.0	17.5	15.0	16.5	25.5	18.5	21.5
15	8.0	3.0	5.5	18.5	11.5	14.0	18.5	15.5	17.0	24.5	19.0	21.0
16	8.5	2.5	5.0	13.5	8.5	11.5	17.0	15.0	16.0	20.5	18.0	19.5
17	10.0	4.5	6.5	17.0	11.0	13.0	21.5	14.0	17.5	19.0	17.5	18.0
18	11.0	5.0	7.0	15.0	8.5	11.0	23.0	15.0	18.5	19.5	16.0	17.5
19	9.0	7.5	8.0	14.5	6.0	10.0	24.5	15.5	19.5	20.5	15.0	17.5
20	14.0	8.5	10.0	24.0	7.5	11.5	24.5	15.5	19.5	21.5	16.0	18.5
21	13.0	6.0	9.0	12.0	10.0	11.0	25.5	17.5	20.5	23.0	17.5	20.0
22	14.0	8.5	11.0	9.5	2.0	8.0	25.5	17.0	20.5	23.0	18.5	20.5
23	15.5	11.0	13.0	14.5	8.0	10.5	24.0	18.0	21.5	23.0	19.0	20.5
24	18.5	13.0	15.5	16.0	8.0	13.0	24.0	17.5	20.5	19.0	17.0	18.0
25	16.5	15.0	15.5	17.5	10.0	12.5	24.0	18.5	20.5	22.5	15.5	18.0
26	14.0	8.5	13.5	17.5	8.0	12.0	24.0	16.0	20.0	23.5	15.5	18.5
27	15.5	8.5	11.5	18.0	9.5	13.5	21.0	17.5	19.0	24.0	16.0	19.5
28	14.0	9.5	11.5	21.5	13.0	16.5	25.5	18.0	21.0	23.0	17.5	19.5
29	---	---	---	23.5	16.0	19.0	25.5	18.5	21.5	22.5	18.0	20.0
30	---	---	---	24.0	14.5	19.5	25.0	15.5	19.0	21.0	18.5	19.5
31	---	---	---	23.5	17.0	19.5	---	---	---	19.5	19.0	19.0
MONTH	18.5	2.0	8.5	24.0	2.0	13.0	25.5	8.0	17.5	25.5	8.0	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.5	19.5	22.5	22.0	16.5	20.5	25.5	22.5	24.0	25.0	19.5	22.0
2	24.5	19.5	21.5	23.0	20.0	21.0	24.5	21.0	22.5	26.0	20.0	22.0
3	24.5	19.0	21.5	25.5	19.5	22.0	25.5	19.0	21.5	26.0	19.5	22.5
4	26.0	20.0	22.5	25.5	20.5	22.5	26.0	18.0	21.0	27.0	20.5	23.0
5	28.0	21.0	24.0	26.0	21.0	23.0	22.5	17.5	20.0	27.5	21.0	23.0
6	26.5	22.0	23.0	24.5	21.5	22.5	24.5	20.0	21.5	27.0	21.5	23.5
7	23.5	14.0	21.5	25.0	21.5	23.0	25.0	20.5	22.5	27.0	21.0	23.5
8	22.5	20.5	21.5	27.0	16.5	23.0	25.0	17.5	22.0	26.0	21.5	23.5
9	24.5	20.0	22.0	28.5	21.0	24.0	25.5	22.5	23.5	28.0	21.5	23.5
10	25.0	14.0	22.0	28.0	22.0	24.5	27.0	15.0	23.5	27.0	21.5	23.5
11	26.0	21.5	23.0	28.5	22.0	24.5	27.5	14.0	23.5	26.0	22.0	23.5
12	25.0	20.5	22.5	29.5	22.0	24.5	26.0	21.5	23.5	23.0	20.0	21.5
13	24.0	16.0	20.0	29.5	22.0	24.5	27.5	21.5	24.0	22.0	16.5	19.0
14	23.5	16.0	19.0	29.5	22.0	25.0	27.0	22.0	24.0	21.5	13.5	16.5
15	24.5	17.5	20.5	29.5	22.5	25.0	28.0	21.5	24.0	20.5	12.5	16.0
16	23.0	20.5	22.0	27.0	14.5	24.5	23.0	22.0	22.0	21.5	13.5	16.5
17	25.5	20.5	22.5	28.5	23.0	25.0	22.5	21.5	22.0	22.0	13.0	16.5
18	26.5	22.0	23.5	30.5	22.5	24.5	23.0	22.0	22.0	22.5	13.5	17.0
19	25.0	21.0	22.5	28.5	22.0	24.5	24.0	20.5	22.0	22.5	14.0	17.5
20	25.5	19.0	21.5	29.5	22.5	25.0	23.5	21.5	22.5	22.0	14.5	17.5
21	25.0	18.0	21.0	29.0	23.0	25.0	24.0	21.5	22.5	21.5	14.0	18.0
22	25.5	14.5	21.0	29.0	23.0	25.0	24.0	20.0	21.5	23.5	17.0	19.5
23	26.0	14.5	22.0	25.5	14.5	23.0	21.5	19.0	20.0	24.0	17.0	19.5
24	27.0	20.5	23.0	23.0	21.5	22.5	22.0	19.5	20.5	23.0	18.5	20.0
25	25.0	21.0	22.5	23.5	21.5	22.5	22.0	21.0	21.5	21.0	18.5	19.5
26	26.5	16.5	23.5	24.5	14.0	23.0	23.5	21.0	22.0	23.0	17.5	19.5
27	26.5	20.0	22.5	24.5	22.5	23.5	23.5	21.0	22.0	22.0	16.5	18.5
28	24.5	16.5	21.5	23.0	22.0	22.5	24.0	20.5	21.5	21.0	13.0	16.0
29	24.5	20.5	22.0	23.5	21.5	22.5	25.5	20.0	22.0	21.0	12.5	16.0
30	23.5	21.0	22.0	25.5	14.0	23.0	26.0	21.0	22.5	21.0	13.5	16.5
31	---	---	---	26.5	22.0	23.5	25.0	21.0	22.5	---	---	---
MONTH	28.0	14.0	22.0	30.5	14.0	23.5	28.0	14.0	22.5	28.0	12.5	20.0
YEAR	30.5	.0	16.0									

02146300 IRWIN CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°11'50", long 80°54'18", Mecklenburg County, Hydrologic Unit 03050103, on left bank at sewage-disposal plant of city of Charlotte, 2,200 ft upstream from Southern Railway bridge, 0.7 mi upstream from Taggart Creek, and 4.2 mi southwest of City Hall, Charlotte.

DRAINAGE AREA.--30.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1962 to current year. Prior to October 1963, published as Sugar (Irwin) Creek at Charlotte.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 591.53 ft above National Geodetic Vertical Datum of 1929 (levels by city of Charlotte).

REMARKS.--No estimated daily discharges. Records good except those below 15 ft³/s, which are fair. Since July 2, 1981, wash water from upstream city water filtration plants enters creek below gage via sewer to waste water treatment plant. Creek channel improved by dredging in 1917 and maintained by Mecklenburg County Drainage Commission to present time. The drainage area is urbanized and has an impervious area of about 20 percent.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--23 years, 43.7 ft³/s, 19.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,880 ft³/s May 30, 1975, gage height, 18.04 ft; minimum, 2.9 ft³/s Sept. 25, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1936 reached a stage of about 17.3 ft at site 400 ft downstream, from information by plant employee. Peak may have been affected by failure of Lakewood Dam 5 mi upstream. Flood of Jan. 6, 1962 reached a stage of 14.32 ft, from floodmarks, discharge, 4,120 ft³/s. Flood of Apr. 11, 1962 reached a stage of 15.18 ft, from floodmarks, discharge, 4,740 ft³/s, on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0100	2,820	9.81	June 7	2045	*4,590	*12.65
May 16	0215	4,330	12.29	Aug. 17	1145	2,900	9.96
May 16	2315	3,010	10.16	Aug. 24	1200	3,280	10.63

Minimum discharge, 5.2 ft³/s Oct. 13, 14, Nov. 3, 4; minimum gage height, 0.51 ft Oct. 13, 14; minimum daily, 5.2 ft³/s Nov. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	6.9	8.7	8.9	731	25	15	10	12	29	14	10
2	9.7	5.9	87	52	518	24	13	55	12	106	14	12
3	8.6	5.2	103	259	62	22	13	226	25	18	18	11
4	7.7	69	15	456	38	21	13	22	12	13	9.7	12
5	6.4	16	205	51	131	19	13	14	30	13	10	11
6	6.3	9.1	46	26	84	18	46	13	184	12	13	9.6
7	6.3	7.9	18	22	45	17	13	11	760	51	10	10
8	7.0	7.8	14	20	31	17	12	14	183	13	13	12
9	7.6	7.8	13	17	27	17	12	33	35	12	14	8.7
10	8.1	8.0	14	16	25	17	12	24	24	11	9.9	8.6
11	7.8	48	13	16	73	17	13	89	21	12	8.9	8.5
12	7.1	9.7	11	14	134	17	12	38	21	9.8	7.8	7.9
13	5.7	7.7	12	14	36	16	12	15	17	22	8.2	7.6
14	5.3	8.9	9.7	15	26	16	13	13	15	17	9.0	7.0
15	6.0	8.6	9.8	15	24	16	38	30	56	13	8.6	6.8
16	7.3	8.6	10	14	22	15	147	1010	100	24	11	7.5
17	7.3	8.2	11	40	21	16	31	411	19	11	786	7.8
18	6.4	8.2	12	15	20	15	16	46	14	9.4	64	6.8
19	6.6	10	9.1	13	21	15	14	28	13	9.2	18	6.8
20	53	9.9	9.1	13	28	15	13	21	13	9.1	13	6.9
21	31	9.0	9.0	19	19	16	12	19	14	12	268	6.7
22	37	9.0	17	18	18	61	12	17	13	29	19	6.5
23	9.7	8.5	8.6	18	18	22	11	16	14	18	11	6.9
24	11	8.7	8.0	18	18	17	28	15	64	77	469	7.4
25	6.6	8.9	8.0	14	111	16	36	15	46	84	61	6.9
26	6.3	10	7.7	13	204	15	12	14	15	134	48	6.2
27	5.9	9.7	8.0	14	44	14	10	13	13	66	22	7.8
28	6.1	77	8.1	22	29	14	12	26	12	52	16	6.5
29	7.4	14	8.0	19	---	15	11	17	44	35	13	6.1
30	7.3	10	8.6	13	---	14	9.5	15	43	31	25	6.8
31	7.8	---	8.8	185	---	14	---	14	---	17	15	---
TOTAL	368.3	436.2	730.2	1449.9	2558	573	624.5	2304	1844	969.5	2027.1	246.3
MEAN	11.9	14.5	23.6	46.8	91.4	18.5	20.8	74.3	61.5	31.3	65.4	8.21
MAX	53	77	205	456	731	61	147	1010	760	134	786	12
MIN	5.3	5.2	7.7	8.9	18	14	9.5	10	12	9.1	7.8	6.1
CFSM	.39	.47	.77	1.52	2.98	.60	.68	2.42	2.00	1.02	2.13	.27
IN.	.45	.53	.88	1.76	3.10	.69	.76	2.79	2.23	1.17	2.46	.30

CAL YR 1984 TOTAL 17297.5 MEAN 47.3 MAX 909 MIN 5.2 CFSM 1.54 IN. 20.96
WTR YR 1985 TOTAL 14131.0 MEAN 38.7 MAX 1010 MIN 5.2 CFSM 1.26 IN. 17.12

02146300 IRWIN CREEK NEAR CHARLOTTE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/10	1020	WATER	0	.57	7	260	7.50	19.0		9.8	620
84/11/13	0945	WATER	0	.59	8	169	7.20	6.0	5.5	12.0	260
84/12/04	1035	WATER	0	.72	14	166	7.30	7.0		11.4	1200
85/01/22	1040	WATER	0	.90	24	204	7.60	4.0		13.2	930
85/02/06	1030	WATER	0	1.52	66	104	7.10	5.0	50.0	11.6	1300
85/03/19	1025	WATER	0	.74	15	388	8.30	7.0		14.9	260
85/04/10	1030	WATER	0	.68	12	138	7.70	9.0		13.2	110
85/05/08	1135	WATER	0	.68	12				4.8		
85/06/10	1020	WATER	0	.89	23	252	7.20	22.0		4.8	13000
85/07/10	1010	WATER	0	.66	11	250	7.50	25.0		9.2	790
85/08/06	1015	WATER	0.1	.61	9	264	7.50	23.0	5.2	8.4	300
85/09/11	0955	WATER	0.1	.70	9	274	6.70	21.0		7.0	560

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/10	1020	WATER	0	81	2	230	.07	.010	.300	.040	.020
84/11/13	0945	WATER	0	104	3	180	.70	.050	.300	.110	.060
84/12/04	1035	WATER	0	57	13	160	.99	.100	.300	.150	.070
85/01/22	1040	WATER	0	83	7	190	1.10	.240	.400	.050	.020
85/02/06	1030	WATER	0	40	22	160	1.20	.300	.600	.170	.090
85/03/19	1025	WATER	0	84	4	190	.57	.010	.200	.030	.010K
85/04/10	1030	WATER	0	90	3	210	.55	.050	.400	.020	.010K
85/05/08	1135	WATER	0				.85	.270	.500	.150	.030
85/06/10	1020	WATER	0	73	10	200	1.00	.030	.400	.070	.010K
85/07/10	1010	WATER	0	86	5	250	.54	.070	.200	.060	.030
85/08/06	1015	WATER	0.1	94	1	250	.10	.030	.300	.050	.010K
85/09/11	0955	WATER	0.1	99	2	250	.32	.090	.400	.060	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/13	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/22	1040	WATER	0		20K	60	20K	100K		100K	20
85/02/06	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	90
85/03/19	1025	WATER	0				20K				20K
85/04/10	1030	WATER	0				20K				20K
85/05/08	1135	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/06/10	1020	WATER	0				20K				20
85/07/10	1010	WATER	0		20K	50K	20K	100K		100K	20K
85/08/06	1015	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K
85/09/11	0955	WATER	0.1				20K				20K

K Less than noted value.

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC

LOCATION.--Lat 35°09'53", long 80°51'12", Mecklenburg County, Hydrologic Unit 03050103, on right bank at downstream side of bridge on Seneca Place, 0.8 mi upstream from mouth, and 4 mi south of city hall in Charlotte.

DRAINAGE AREA.--2.72 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1967-70, December 1982 to current year.

GAGE.--Water-stage recorder with concrete control. Datum of gage is 597.77 ft above National Geodetic Vertical Datum of 1929 (North Carolina Coast and Geodetic Survey bench mark).

REMARKS.--Records fair. The drainage area is urbanized and has an impervious area of about 25 percent.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s June 7, 1985, gage height, 8.47 ft; minimum, 0.02 ft³/s Aug. 20, 21, 22, 1983, gage height, 2.97 ft; minimum daily, 0.06 ft³/s Aug. 21, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 4	0830	527	5.95	June 29	2130	520	5.93
Feb. 1	0015	441	5.70	Aug. 17	1115	879	6.83
May 15	2400	1,320	7.80	Aug. 24	1115	700	6.40
June 7	1945	*1,680	*8.47				

Minimum daily, 0.17 ft³/s Oct. 19.

REVISIONS.--The maximum discharge for the water year 1984 has been revised to 958 ft³/s, Dec. 6, 1983, gage height, 7.02 ft. Peak discharges for Mar. 28, 1983 (0845 hours) has been revised to 715 ft³/s, gage height, 6.44 ft and Mar. 28, 1983 (1845 hours) has been revised to 910 ft³/s, gage height, 6.90 ft. These figures supersede those published in the report for 1984.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	e.36	.38	.32	64	1.5	e.63	.42	.32	8.7	e.50	.68
2	.34	e.35	10	6.9	30	1.3	.62	4.0	.31	12	e.45	.58
3	.28	e.35	14	31	3.1	1.2	.60	7.1	1.6	1.4	e.40	.55
4	.26	6.5	.64	43	2.0	1.2	.57	.63	.35	.84	e.35	.50
5	.35	1.0	25	2.2	13	1.1	.60	.58	4.9	.85	e.34	.50
6	.39	.34	2.5	1.3	5.7	e1.0	2.8	.57	16	.80	e.35	.52
7	.29	.35	.93	1.1	2.4	e.98	.63	.54	133	.82	e.33	.47
8	.24	.33	.72	.94	1.7	e.94	.60	.73	5.1	.72	e.50	.64
9	.27	.27	.65	.81	1.4	e.90	.57	1.8	1.4	.59	e.45	.49
10	.32	.33	.63	.72	1.3	e.88	.58	.87	1.1	2.3	e.35	.42
11	.32	3.5	.65	.70	7.7	e.84	.64	4.3	.85	1.7	e.30	.38
12	.32	.36	.57	.66	6.6	e.80	.89	.90	.79	.54	e.27	.36
13	.29	.30	.55	.65	1.8	.74	.55	.55	.70	e1.9	e.24	.34
14	.31	.32	.53	.66	1.4	.82	.52	.51	.65	1.1	e.23	.35
15	.19	.28	.51	.66	1.3	.78	2.8	41	2.2	1.0	e.25	.33
16	.19	.34	.48	.66	1.2	.72	11	62	6.9	1.0	e4.0	.36
17	.25	.32	.47	2.7	1.1	.76	1.2	8.3	.88	.67	104	.36
18	.23	.34	.48	.72	1.0	.72	.81	1.4	.73	.39	2.2	.40
19	.17	.31	.46	.63	1.2	.75	.77	1.3	.66	.40	.91	.38
20	1.7	.36	.41	.80	1.7	1.2	.68	1.1	.59	.33	.64	.30
21	.72	.36	.40	.80	1.0	1.1	.63	.96	.49	.30	26	.33
22	9.0	.39	.91	.83	.99	4.4	1.2	.84	.47	.48	1.2	.43
23	.63	.45	.39	.79	.97	1.1	.56	.76	.45	.33	.98	.33
24	.93	.45	.39	.70	.99	.95	3.2	.48	.45	5.2	44	.28
25	e.38	.47	.35	.68	17	.88	1.2	.38	.44	3.2	2.7	.30
26	e.30	.48	.34	.60	7.9	.86	.54	.33	.45	7.0	1.9	.21
27	e.35	.47	.37	.62	2.2	e.82	.49	.33	.41	e3.0	1.1	.23
28	e.60	7.7	.34	1.8	1.7	e.78	.48	5.1	.38	e1.6	.86	.19
29	e.50	.57	.34	1.0	---	e.72	.44	.93	29	e.90	.78	.18
30	e.45	.41	.36	.69	---	e.68	.44	.44	3.7	e.70	2.1	.21
31	e.38	---	.33	24	---	e.65	---	.40	---	e.75	1.0	---
TOTAL	22.65	28.36	65.08	129.64	182.35	32.07	37.24	149.55	215.27	61.51	199.68	11.60
MEAN	.73	.95	2.10	4.18	6.51	1.03	1.24	4.82	7.18	1.98	6.44	.39
MAX	9.0	7.7	25	43	64	4.4	11	62	133	12	104	.68
MIN	.17	.27	.33	.32	.97	.65	.44	.33	.31	.30	.23	.18
CFSM	.27	.35	.77	1.54	2.39	.38	.46	1.77	2.64	.73	2.37	.14
IN.	.31	.39	.89	1.77	2.49	.44	.51	2.05	2.94	.84	2.73	.16

CAL YR 1984	TOTAL	1454.21	MEAN	3.97	MAX	116	MIN	.12	CFSM 1.46	IN.	19.89
WTR YR 1985	TOTAL	1135.00	MEAN	3.11	MAX	133	MIN	.17	CFSM 1.14	IN.	15.52

e Estimated

SANTEE RIVER BASIN

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--July 1980, November 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1982 to current year.
WATER TEMPERATURE: November 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1982.

REMARKS.--Station operated as part of the Charlotte-Mecklenburg County Water-Quality Study. Interruptions in the daily record were due to malfunctions of the monitor.

COOPERATION.--Chemical samples were collected by the U. S. Geological Survey. Laboratory analyses, other than the organics, were performed by the Mecklenburg County Department of Environmental Health Laboratory. The analyses for the organics were performed by the U. S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 393 microsiemens June 4, 1985; minimum recorded, 32 microsiemens May 15, 1985.
WATER TEMPERATURE: Maximum recorded, 32.5°C July 5, 1984; minimum recorded, 0.0°C Jan. 20, 21, 22, 1985.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 393 microsiemens June 4; minimum, 32 microsiemens May 15.
WATER TEMPERATURE: Maximum, 32.0°C July 9, 10; minimum recorded, 0.0°C Jan. 20, 21, 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
APR 23...	1455	.53	180	7.4	23.0	--	<5	2.1	68	8.3
SEP 23...	1250	.30	210	7.7	18.5	9.4	5	1.9	68	7.8

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)
APR 23...	7.3	<.2	141	.70	.050	.010	<1	3	<100	<100
SEP 23...	8.1	<.2	140	.26	.110	.060	<1	<1	<100	<100

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
APR 23...	<1	<1	1	1	<50	<50	660	220	2	<1
SEP 23...	<1	<1	2	1	<50	<50	1600	170	1	1

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR 23...	60	70	.2	<.2	1	3	<1	<1	<50	<50
SEP 23...	90	100	<.2	<.2	2	2	<1	<1	520	<50

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	148	111	132	205	189	198	196	188	191	205	163	190
2	158	123	130	204	191	200	200	60	175	213	122	188
3	147	135	139	203	192	199	157	81	129	208	123	139
4	155	146	150	203	110	153	178	158	170	---	---	---
5	157	152	154	200	141	170	182	83	119	---	---	---
6	159	152	156	211	183	195	202	122	168	---	---	---
7	162	151	157	189	182	187	212	183	192	---	---	---
8	169	157	161	191	184	188	214	192	203	---	---	---
9	171	157	164	192	185	190	209	199	204	---	---	---
10	167	154	161	195	188	191	204	202	203	---	---	---
11	164	158	162	199	133	153	205	199	202	186	183	184
12	172	153	164	169	154	162	204	200	203	188	183	186
13	171	158	165	182	171	175	211	200	204	190	180	185
14	172	162	168	193	181	187	212	207	210	191	182	185
15	173	158	166	198	190	194	211	206	209	185	180	183
16	174	164	169	199	189	194	210	203	207	192	180	186
17	180	165	173	201	193	198	207	200	204	190	110	132
18	177	168	170	200	190	196	206	196	202	162	136	150
19	255	177	195	200	192	197	222	207	213	179	163	172
20	275	159	251	200	191	197	209	192	200	184	175	179
21	154	136	143	201	191	196	207	191	201	201	184	193
22	170	105	147	199	189	195	225	196	211	235	197	214
23	183	128	155	199	189	195	217	187	201	---	---	---
24	209	185	193	201	192	197	194	176	187	---	---	---
25	208	191	199	203	194	199	211	173	189	---	---	---
26	206	194	202	204	195	201	210	182	198	---	---	---
27	228	195	208	207	192	200	201	171	190	---	---	---
28	210	193	196	202	101	152	205	177	194	---	---	---
29	205	197	201	171	144	160	207	171	193	---	---	---
30	207	194	200	188	172	181	203	169	191	---	---	---
31	209	194	203	---	---	---	206	164	190	---	---	---
MONTH	275	105	172	211	101	187	225	60	192	235	110	178

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	189	180	185	226	199	212	186	177	182
2	154	69	116	184	174	181	216	183	203	185	86	141
3	172	156	167	185	175	180	218	197	210	134	71	106
4	177	173	175	188	170	180	231	209	221	168	135	153
5	177	64	115	190	163	180	241	204	225	181	169	176
6	151	102	130	190	168	180	198	162	177	181	174	178
7	171	153	164	187	167	179	220	189	203	182	173	176
8	179	172	175	187	162	176	226	193	211	178	170	176
9	181	176	179	188	166	178	224	192	210	180	118	161
10	183	178	181	217	182	192	221	189	206	150	118	131
11	185	69	163	215	156	179	218	186	204	159	97	139
12	159	82	124	189	152	174	219	186	203	190	150	168
13	174	159	167	264	150	182	225	200	214	212	180	193
14	179	176	177	---	---	---	227	197	213	212	190	201
15	184	178	181	198	166	185	214	172	200	213	32	189
16	185	179	183	198	162	182	179	70	132	---	---	---
17	185	179	183	193	157	180	181	123	155	---	---	---
18	186	180	183	195	164	181	195	181	188	191	158	170
19	186	180	183	194	164	181	195	188	190	195	182	190
20	183	163	170	194	167	182	193	182	189	184	180	181
21	199	165	177	188	157	174	192	184	188	186	181	184
22	198	178	185	180	107	130	199	185	191	186	180	182
23	188	181	185	203	165	184	188	180	185	185	181	182
24	186	177	182	208	174	191	186	93	172	181	176	179
25	197	67	170	214	178	196	155	104	133	180	172	177
26	170	76	141	205	160	186	176	155	167	180	170	176
27	186	171	182	201	158	183	189	175	178	178	168	175
28	188	184	186	207	175	192	184	178	181	176	82	147
29	---	---	---	214	176	199	187	178	182	152	107	132
30	---	---	---	219	173	200	184	177	181	194	154	170
31	---	---	---	219	179	203	---	---	---	209	194	201
MONTH	199	64	168	264	107	183	241	70	191	213	32	170

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	206	199	203	154	69	124	193	178	183	195	179	185
2	208	202	204	140	68	101	193	185	189	205	195	198
3	203	137	170	---	---	---	193	184	189	209	198	204
4	393	170	223	---	---	---	198	182	191	211	202	207
5	212	73	191	215	185	208	200	181	191	212	204	209
6	140	73	108	214	202	208	200	188	193	222	210	214
7	144	40	109	214	194	204	201	190	197	223	208	215
8	---	---	---	210	190	203	201	186	195	221	202	212
9	195	181	190	211	173	196	197	188	193	221	209	214
10	209	194	201	196	180	187	199	188	194	224	210	217
11	234	201	215	162	93	133	200	189	195	221	206	214
12	242	219	231	175	162	168	201	191	197	218	206	213
13	222	210	217	185	99	170	205	188	200	217	204	211
14	211	204	208	190	141	154	211	200	206	214	202	209
15	208	124	195	152	135	142	208	189	202	215	208	212
16	137	64	106	168	115	159	---	---	---	221	212	217
17	166	123	144	164	133	150	---	---	---	219	208	214
18	180	167	176	176	164	168	---	---	---	239	212	221
19	195	189	191	177	169	173	---	---	---	222	215	219
20	197	193	195	185	174	180	---	---	---	224	207	217
21	202	195	197	188	178	185	---	---	---	220	198	210
22	202	195	198	192	141	177	---	---	---	218	198	208
23	203	193	198	190	162	181	---	---	---	214	196	206
24	203	193	199	194	65	155	---	---	---	207	195	201
25	206	196	201	157	76	109	278	170	210	254	192	204
26	206	196	201	130	61	104	219	190	208	286	193	214
27	203	195	198	169	129	149	190	179	184	264	203	217
28	204	195	199	165	82	122	209	190	201	231	208	219
29	206	54	179	148	82	123	215	207	211	211	195	204
30	152	93	131	149	92	126	217	135	196	235	194	214
31	---	---	---	177	151	166	178	135	158	---	---	---
MONTH	393	40	185	215	61	159	278	135	195	286	179	211
YEAR	393	32	183									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	14.0	15.0	21.5	19.5	20.5	13.5	9.5	11.0	16.5	12.5	14.0
2	15.5	11.0	13.5	22.0	19.5	20.5	12.5	9.0	10.5	17.0	14.0	15.5
3	15.5	10.5	12.5	19.5	14.5	16.5	13.0	10.5	12.0	15.5	9.0	11.5
4	17.5	11.5	14.0	14.5	13.5	14.0	11.5	9.0	10.0	---	---	---
5	17.5	13.5	15.5	17.0	14.5	15.5	10.0	8.5	9.0	---	---	---
6	18.0	14.5	16.5	16.5	13.0	14.5	10.0	5.5	9.0	---	---	---
7	18.5	15.5	17.0	13.0	9.5	11.5	8.0	3.5	5.5	---	---	---
8	20.0	16.5	18.0	13.0	9.0	11.0	9.5	4.0	6.5	---	---	---
9	19.5	16.5	18.0	13.5	9.5	11.5	10.5	5.0	7.5	---	---	---
10	20.0	17.5	18.5	15.0	10.0	12.0	10.0	6.5	8.5	---	---	---
11	19.5	17.0	18.0	16.0	13.5	15.5	13.0	8.0	10.0	5.0	3.5	4.5
12	19.0	15.5	17.5	14.0	10.5	12.0	13.0	8.0	10.5	7.0	2.5	4.0
13	19.0	15.0	17.0	12.5	8.5	10.5	15.0	10.0	12.0	7.5	1.0	3.0
14	18.5	15.0	16.5	11.0	8.0	9.5	16.5	11.5	13.5	5.5	1.0	3.0
15	19.5	15.5	17.5	12.0	8.0	10.0	16.5	11.0	13.5	7.0	1.5	3.5
16	20.5	17.0	18.5	15.0	11.0	12.5	16.0	11.5	13.5	6.0	.5	3.0
17	20.5	18.5	19.5	11.5	8.0	9.5	17.0	13.0	14.5	6.5	4.0	5.5
18	21.5	19.0	20.0	11.5	8.0	10.0	18.0	13.0	15.0	8.0	4.5	6.0
19	22.0	19.5	20.5	16.5	11.0	13.5	16.5	13.5	14.5	9.5	5.5	6.5
20	22.0	19.0	20.5	13.0	9.0	11.0	15.0	13.5	14.0	5.5	.0	3.5
21	24.0	21.0	22.0	9.0	6.5	8.0	16.5	13.5	14.5	1.0	.0	.5
22	24.0	21.5	22.5	9.5	6.0	7.5	15.5	12.0	14.5	1.0	.0	.0
23	23.5	22.5	23.0	9.5	5.5	7.5	12.0	8.0	10.0	---	---	---
24	24.5	21.5	22.5	9.5	6.0	7.5	11.0	6.5	9.0	---	---	---
25	23.5	21.5	22.5	10.0	6.5	8.5	14.5	9.5	11.5	---	---	---
26	22.5	20.0	21.0	11.0	7.0	9.0	10.0	7.0	8.5	---	---	---
27	21.5	18.5	20.0	13.5	9.5	11.5	14.0	9.0	11.0	---	---	---
28	23.0	20.0	21.5	16.5	11.5	14.5	14.5	8.5	11.5	---	---	---
29	24.0	22.0	22.5	13.0	8.5	10.5	16.0	10.0	12.5	---	---	---
30	23.0	21.0	22.0	11.5	7.5	9.5	16.5	11.0	13.5	---	---	---
31	21.5	20.0	20.5	---	---	---	15.0	12.0	13.5	---	---	---
MONTH	24.5	10.5	19.0	22.0	5.5	12.0	18.0	3.5	11.5	17.0	.0	5.5

02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	11.0	8.5	10.0	23.0	13.0	16.5	25.5	13.5	18.5
2	8.0	7.0	7.5	16.5	9.0	11.5	21.0	10.5	14.0	18.5	17.0	18.0
3	8.0	5.5	7.0	16.0	8.5	11.5	21.5	8.5	13.5	22.0	15.5	18.5
4	7.0	4.5	5.5	17.5	10.5	13.5	24.0	11.5	16.5	23.5	13.0	17.0
5	4.5	3.0	4.0	21.0	12.5	15.5	21.0	14.0	17.0	24.5	12.5	17.0
6	7.0	4.5	6.0	17.0	8.5	12.0	23.5	15.0	18.0	26.0	13.5	18.5
7	8.5	4.5	6.0	15.5	7.0	10.0	24.0	12.5	16.5	26.0	15.5	19.5
8	7.0	1.5	3.5	19.0	8.0	12.5	22.0	11.0	15.0	18.5	15.0	17.0
9	7.5	.5	3.5	14.5	11.5	13.5	21.0	10.0	13.5	17.5	14.5	16.0
10	8.5	2.5	5.0	18.0	7.5	11.5	20.5	8.5	13.0	22.0	16.5	18.5
11	8.5	3.0	6.0	---	---	---	22.5	10.0	15.0	23.0	18.0	20.0
12	8.0	4.5	6.0	---	---	---	24.0	12.5	17.5	25.5	15.5	21.0
13	8.5	2.5	5.0	---	---	---	22.5	15.5	18.5	28.0	19.0	22.5
14	7.5	2.5	4.5	---	---	---	19.5	16.0	18.0	30.0	19.5	23.5
15	8.5	2.0	4.5	19.0	10.5	13.5	19.5	17.0	18.0	27.5	18.0	22.5
16	8.5	1.0	4.0	14.5	7.5	11.0	18.5	15.5	17.0	22.0	17.0	19.0
17	9.0	3.0	6.0	17.0	9.5	12.5	25.0	13.5	18.0	19.0	15.0	17.5
18	10.0	3.5	6.5	16.0	7.0	9.5	25.5	14.5	19.0	20.0	15.0	17.0
19	8.5	6.0	7.5	16.0	5.0	9.0	27.0	14.5	19.5	18.0	14.0	15.5
20	13.5	7.5	9.5	18.5	6.0	11.0	27.0	15.0	19.5	18.5	15.5	17.0
21	13.5	5.5	8.5	12.5	9.0	10.5	27.5	15.0	20.0	18.5	18.0	18.0
22	14.0	8.0	10.5	9.0	7.5	8.0	26.5	15.0	19.5	20.0	18.5	19.0
23	15.5	10.5	12.5	16.0	7.5	10.5	23.0	15.0	18.5	20.0	18.5	19.5
24	19.0	12.0	14.5	17.5	10.5	12.5	24.0	15.5	19.0	19.5	17.0	18.0
25	16.0	13.5	15.0	18.0	8.5	11.5	26.0	16.5	20.0	23.0	15.0	18.0
26	14.5	13.0	13.5	19.0	6.0	12.0	25.5	14.5	19.0	23.0	15.0	18.5
27	16.5	12.0	14.0	19.5	8.0	13.0	21.5	15.5	18.0	24.5	16.0	20.0
28	15.5	8.5	11.5	22.5	12.0	16.0	26.5	17.0	20.5	23.0	15.5	19.5
29	---	---	---	25.0	15.0	19.0	26.5	17.0	20.0	24.5	18.5	21.0
30	---	---	---	25.5	16.5	19.5	25.0	16.0	18.0	21.5	18.5	20.0
31	---	---	---	25.0	15.5	19.0	---	---	---	26.5	19.5	22.0
MONTH	19.0	.5	7.5	25.5	5.0	12.5	27.5	8.5	17.5	30.0	12.5	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.0	21.0	24.0	24.5	21.5	23.0	26.5	22.5	24.5	26.0	19.5	22.5
2	25.0	20.5	22.5	26.0	21.0	23.0	25.0	21.0	23.0	27.5	20.5	23.0
3	27.0	20.5	23.5	28.5	20.5	24.0	26.5	19.0	22.0	27.0	20.5	23.0
4	27.5	21.0	24.0	28.0	21.0	24.0	27.0	18.5	21.5	27.0	21.0	23.5
5	29.5	22.0	25.0	27.5	21.5	24.0	25.0	18.0	21.0	27.0	21.5	23.5
6	29.0	22.5	24.5	25.5	22.5	24.0	24.5	20.5	22.0	28.5	21.5	24.0
7	28.0	16.0	23.5	30.0	22.0	25.0	26.5	20.5	23.0	28.5	22.0	24.5
8	25.5	20.0	22.5	30.0	21.5	25.0	24.5	22.0	23.0	27.5	22.5	24.5
9	28.0	21.5	24.0	32.0	22.0	26.0	27.0	22.0	24.0	28.5	22.5	24.5
10	29.5	23.0	25.0	32.0	24.5	27.0	29.0	22.0	24.5	28.0	22.5	24.5
11	29.5	23.5	26.0	30.5	23.5	26.0	27.5	22.0	24.5	26.5	22.5	24.5
12	28.0	23.5	25.0	31.0	23.0	26.0	28.0	22.5	25.0	23.5	20.5	22.0
13	26.5	19.5	22.5	30.0	23.0	25.5	28.5	23.0	25.5	21.0	17.5	19.0
14	26.0	18.0	21.5	31.0	22.5	25.5	28.0	22.5	25.0	21.0	13.0	16.5
15	27.0	20.0	22.5	26.5	22.5	24.5	28.0	22.0	24.5	21.5	13.0	16.5
16	26.5	23.0	24.5	29.5	23.0	25.5	---	---	---	22.0	13.5	17.0
17	29.0	22.0	25.0	30.0	23.0	25.5	---	---	---	23.5	13.5	17.0
18	29.0	23.5	25.5	28.5	22.5	25.0	---	---	---	23.0	14.0	17.5
19	27.5	23.5	25.0	28.0	21.5	24.5	---	---	---	23.5	15.0	18.0
20	27.0	20.0	23.0	29.5	22.5	25.5	---	---	---	23.5	15.0	18.5
21	26.5	20.0	23.0	30.0	23.0	26.0	24.0	21.5	22.5	22.5	17.5	19.5
22	27.0	21.0	23.5	30.0	23.0	25.5	24.5	19.5	21.5	24.0	18.5	20.5
23	27.0	21.5	24.0	25.5	22.5	24.0	22.5	18.5	20.0	24.0	18.0	20.5
24	28.0	22.5	25.0	23.5	21.5	22.5	22.5	20.0	21.0	22.5	19.5	21.0
25	28.0	22.0	25.0	24.0	22.0	23.0	23.5	21.5	22.0	21.5	18.5	20.0
26	28.0	23.0	25.5	25.0	22.5	23.5	24.5	21.5	22.0	22.0	18.0	19.5
27	26.0	21.0	23.5	24.5	22.5	23.0	25.5	21.5	22.5	22.5	17.5	19.5
28	25.5	21.0	23.0	23.5	22.5	23.0	25.5	20.5	22.5	19.5	13.5	16.5
29	26.0	22.0	23.5	25.0	22.5	23.5	27.0	20.5	23.0	20.0	11.0	16.5
30	26.5	22.5	23.5	27.5	23.0	24.5	26.5	21.0	22.5	21.0	14.5	17.0
31	---	---	---	29.0	23.0	25.0	26.0	21.0	22.5	---	---	---
MONTH	29.5	16.0	24.0	32.0	20.5	24.5	29.0	18.0	23.0	28.5	11.0	20.5
YEAR	32.0	.0	17.0									

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC

LOCATION.--Lat 35°08'52", long 80°51'29", Mecklenburg County, Hydrologic Unit 03050103, at downstream side of bridge on Secondary Road 3657 (Archdale Drive) in Charlotte, 0.7 mi downstream from Little Hope Creek, and 5.3 mi south of City Hall, Charlotte.

DRAINAGE AREA.--42.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 564.46 ft above National Geodetic Vertical Datum of 1929 (levels by city of Charlotte).

AVERAGE DISCHARGE.--8 years, 79.8 ft³/s, 25.44 in/yr.

REMARKS.--No estimated daily discharges. Records good. The city of Charlotte diverted an average of 81.7 ft³/s for municipal water supply from Catawba River at Mountain Island Lake. An average of 20.6 ft³/s of sewage effluent from Little Sugar Creek waste treatment plant was discharged into the stream 0.4 mi upstream from gage. Since 1911 the creek channel has been dredged and improved. The drainage area is urbanized and has an impervious area of about 20 percent.

COOPERATION.--Chemical and biological data shown in last table were provided by North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft³/s June 7, 1985, gage height, 12.61 ft; minimum, 11 ft³/s Sept. 24, Oct. 14, 1981; minimum gage height, 1.78 ft Oct. 14, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 22, 1975 reached a stage of about 12.7 ft, from floodmarks, discharge, 7,360 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0100	3,260	8.70	Aug. 17	1145	6,860	11.75
May 16	0030	7,740	12.37	Aug. 24	1215	3,410	8.85
June 7	2000	*8,100	*12.61				

Minimum discharge, 13 ft³/s Nov. 9, Aug. 15; minimum gage height, 1.80 ft Nov. 9; minimum daily, 21 ft³/s Nov. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	27	29	24	1050	47	37	34	32	109	30	30
2	29	26	182	163	795	44	35	71	30	178	30	30
3	27	25	241	553	102	41	35	208	52	37	27	32
4	26	129	35	572	66	41	35	35	34	29	25	32
5	27	38	432	73	250	40	34	30	61	30	27	32
6	26	29	81	44	158	38	84	31	402	28	28	31
7	25	27	35	40	81	38	32	31	1250	40	27	30
8	34	27	30	37	59	38	32	34	351	29	30	29
9	27	21	28	36	52	37	35	76	58	29	42	31
10	26	26	30	35	48	36	34	51	44	34	27	31
11	27	86	31	35	123	36	34	158	41	51	23	31
12	26	29	29	33	270	37	34	56	42	28	28	29
13	25	27	29	32	68	36	33	33	38	68	27	27
14	24	28	28	33	57	36	35	33	36	35	26	26
15	26	28	27	33	52	35	68	260	82	29	25	25
16	26	28	26	32	48	35	275	1430	203	34	36	27
17	26	26	28	84	45	34	53	531	43	29	2110	27
18	26	26	27	39	43	34	37	65	38	27	119	29
19	26	27	27	34	41	34	35	43	37	26	44	28
20	29	31	27	34	57	35	33	40	35	26	36	27
21	34	28	27	35	41	36	31	41	34	24	521	26
22	136	26	36	36	39	118	32	37	33	50	52	26
23	40	27	26	36	38	47	32	36	31	47	36	27
24	34	28	25	36	37	37	41	35	109	164	638	28
25	28	27	23	35	103	37	73	34	74	149	146	27
26	27	28	24	34	333	37	33	31	36	250	95	27
27	26	29	25	33	67	36	32	32	34	123	51	26
28	25	154	25	52	51	36	31	86	34	96	40	25
29	27	36	25	49	---	36	30	49	159	63	37	24
30	27	30	24	37	---	35	31	34	130	44	45	28
31	27	---	25	315	---	34	---	34	---	34	45	---
TOTAL	1060	1124	1687	2664	4254	1241	1396	3699	3583	1940	4473	848
MEAN	34.2	37.5	54.4	85.9	152	40.0	46.5	119	119	62.6	144	28.3
MAX	136	154	432	572	1050	118	275	1430	1250	250	2110	32
MIN	24	21	23	24	37	34	30	30	30	24	23	24

CAL YR 1984 TOTAL 34166 MEAN 93.3 MAX 1690 MIN 21
WTR YR 1985 TOTAL 27969 MEAN 76.6 MAX 2110 MIN 21

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/29	0940	WATER	0	2.10	28	350	7.60	24.0		8.6	10K
84/11/27	0930	WATER	0	2.00	22	328	7.50	14.0	8.0	11.0	10K
84/12/11	1045	WATER	0	2.28	40	339	7.60	13.0		11.4	10K
85/01/30	0930	WATER	0	2.18	33	325	7.60	8.0		11.4	20
85/02/25	1050	WATER	0	2.28	40	330	7.50	16.0	6.5	10.6	10K
85/03/28	1040	WATER	0	2.27	39	430	7.70	18.0		10.0	10K
85/04/23	1045	WATER	0	2.34	37	472	7.30	22.0		4.7	10
85/05/22	1030	WATER	0	2.22	36	496	7.30	23.0	23.0	8.1	10K
85/06/25	1040	WATER	0	2.38	50	285	7.30	25.0		6.9	10K
85/07/23	1010	WATER	0.1	2.30	39	290	7.40	26.0		7.2	15
85/08/21	1040	WATER	0.1	7.87	3420	89	6.90	22.0	210.0	8.0	59000
85/09/19	1030	WATER	0.1	2.17	32	450	7.60	22.0		7.8	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	0940	WATER	0	126	5	310					
84/11/27	0930	WATER	0	102	6	240	.26	14.000	14.000	5.600	4.600
84/12/11	1045	WATER	0	116	5	340					
85/01/30	0930	WATER	0	98	11	270	.39	11.000	13.000	3.900	3.600
85/02/25	1050	WATER	0	97	7	240	.25	9.000	9.000	3.000	2.600
85/03/28	1040	WATER	0	126	10	290	.13	14.000	16.000	5.300	4.100
85/04/23	1045	WATER	0	133	43	360	.13	9.400	11.000	.070	4.100
85/05/22	1030	WATER	0	32	42	390	.22	11.000	12.000	5.300	3.700
85/06/25	1040	WATER	0	76	50	230	.51	6.800	6.900	2.800	2.000
85/07/23	1010	WATER	0.1	92	47	240	.38	10.000	11.000	3.100	2.500
85/08/21	1040	WATER	0.1	21	990	1100	.68	.490	1.700	1.000	.070
85/09/19	1030	WATER	0.1	150	11	370	.44	15.000	21.000	5.500	4.400

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/30	0930	WATER	0								40
85/02/25	1050	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/03/28	1040	WATER	0								20
85/04/23	1045	WATER	0								60
85/05/22	1030	WATER	0	10K	20K	50K	20K	100K	.2K	100K	90
85/06/25	1040	WATER	0								20
85/07/23	1010	WATER	0.1								20
85/08/21	1040	WATER	0.1		20K	50	70	200	.2K	100K	190
85/09/19	1030	WATER	0.1					100K			20K

K Less than noted value.

02146579 IRVINS CREEK AT LEBANON ROAD NEAR MINT HILL, NC

LOCATION--Lat 35°09'58", long 80°41'24", Mecklenburg County, Hydrologic Unit 03050103, on left bank at upstream side of bridge on Lebanon Road (Secondary Road 3135), 2.5 mi west of Mint Hill and 3.9 mi upstream from mouth.

DRAINAGE AREA.--5.27 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1982 to current year.

REVISED RECORDS.--WRD NC 84-1: 1983.

GAGE.--Water-stage recorder. Datum of gage is 646.88 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. The drainage area is urbanized and has an impervious area of about 10 percent.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft^3/s Dec. 6, 1983, gage height, 8.29 ft, from rating curve extended above 410 ft^3/s; no flow at times in 1983.

EXTREMES FOR CURRENT PERIOD.--Peak discharges above base discharge of 400 ft^3/s, revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 16	0015	519	5.86	Aug. 17	1930	860	7.08
June 6	1945	513	5.83	Aug. 21	1015	570	6.08
June 7	2015	*974	*7.41				

Minimum, 0.23 ft^3/s July 20, 21, 22, Aug. 12, 13, 14, 16; minimum daily, 0.24 ft^3/s Aug. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	.69	.68	1.3	99	3.4	1.9	1.1	.86	21	1.2	1.9
2	.77	.77	5.8	5.9	92	3.2	1.7	1.2	.75	5.5	.68	e1.6
3	.68	.63	6.6	22	11	2.8	1.7	4.6	.90	2.4	.50	e1.5
4	.64	1.4	1.8	57	6.7	2.7	1.7	1.7	3.3	1.6	.43	e1.3
5	.59	1.0	16	8.6	14	2.6	1.6	1.4	9.1	1.7	.47	e1.2
6	.59	.90	6.2	4.9	16	2.3	2.1	1.2	62	1.1	.48	e1.2
7	.59	.68	2.9	3.6	6.6	2.1	1.6	1.1	162	.94	.45	e1.1
8	.59	.68	2.3	2.8	e3.8	2.2	1.5	1.2	29	.74	.47	e.98
9	.59	.68	2.0	2.5	e3.6	2.2	1.5	3.2	4.4	.61	.38	e.97
10	.62	.68	1.9	2.4	e3.5	2.1	1.5	2.2	2.4	.57	.38	e.97
11	.66	1.3	1.8	2.3	e10	2.0	1.6	2.4	1.7	.70	.34	e.96
12	.60	.64	1.6	2.1	14	2.0	1.5	1.8	1.4	.49	.30	e.96
13	.59	.59	1.5	2.0	e3.8	1.9	1.6	1.5	1.1	1.6	.29	e.94
14	.55	.59	1.5	2.0	e3.5	1.9	1.6	1.2	.96	.79	.24	e.90
15	.50	.59	1.4	2.0	e3.3	1.9	2.4	1.2	.95	.53	.30	e.86
16	.46	.67	1.3	1.9	e3.0	1.9	35	53	2.1	.44	5.0	e.84
17	.58	.63	1.3	2.7	e2.8	2.0	5.2	25	.98	.42	130	e.82
18	.65	.67	1.3	e2.2	e2.6	1.8	2.9	4.4	.78	.35	11	e.80
19	.68	.75	1.3	e1.9	e2.6	1.7	2.3	2.6	.69	.33	2.6	e.78
20	.68	.77	1.3	e1.8	e3.0	1.8	2.0	2.0	.62	.31	1.7	e.77
21	.72	.77	1.3	e1.8	e2.6	1.8	1.8	1.7	.55	.27	70	.74
22	1.5	.88	1.5	e1.8	e2.4	4.2	1.5	1.5	.50	.30	5.2	.72
23	1.1	.88	1.3	e1.7	e2.3	3.1	1.5	1.6	.49	.35	2.8	.71
24	.68	.88	1.2	e1.7	e2.5	2.7	1.7	1.4	.49	4.7	27	.74
25	.65	.88	1.2	e1.7	4.9	2.4	1.9	1.4	.45	3.0	20	.73
26	.64	.88	1.2	e1.7	12	2.4	1.4	1.2	.40	2.8	50	.69
27	.71	.94	1.2	e1.7	4.3	2.2	1.3	1.0	.34	2.5	17	.69
28	.99	2.3	1.3	2.4	3.9	2.2	1.4	1.3	.32	1.9	4.1	.66
29	.91	1.0	1.3	2.7	---	2.1	1.3	1.2	1.5	1.3	2.8	.66
30	.72	.70	1.3	2.6	---	2.0	1.1	.96	2.2	2.7	2.3	.67
31	.70	---	1.3	22	---	1.9	---	.99	---	2.1	2.6	---
TOTAL	24.53	25.42	74.58	173.7	339.7	71.5	87.8	128.25	293.23	64.04	361.01	28.36
MEAN	.79	.85	2.41	5.60	12.1	2.31	2.93	4.14	9.77	2.07	11.6	.95
MAX	3.6	2.3	16	57	99	4.2	35	53	162	21	130	1.9
MIN	.46	.59	.68	1.3	2.3	1.7	1.1	.96	.32	.27	.24	.66
CFSM	.15	.16	.46	1.06	2.30	.44	.56	.79	1.85	.39	2.20	.18
IN.	.17	.18	.53	1.23	2.40	.50	.62	.91	2.07	.45	2.55	.20

CAL YR 1984 TOTAL 2575.50 MEAN 7.04 MAX 251 MIN .32 CFSM 1.34 IN. 18.18
WTR YR 1985 TOTAL 1672.12 MEAN 4.58 MAX 162 MIN .24 CFSM .87 IN. 11.80

e Estimated

SANTEE RIVER BASIN

02146579 IRVINS CREEK AT LEBANON ROAD NEAR MINT HILL, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1980, December 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1982 to current year.
WATER TEMPERATURE: December 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1982.

REMARKS.--Station operated as part of Charlotte-Mecklenburg County Water-Quality Study.

COOPERATION.--Chemical samples were collected by the U.S. Geological Survey. Laboratory analyses, other than organics, were performed by the Mecklenburg County Department of Environmental Health Laboratory. The analyses for the organics were performed by the U. S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 265 microsiemens July 5, 1984; minimum, 23 microsiemens July 29, 1984, June 7, 1985.
WATER TEMPERATURE: Maximum, 30.5°C July 1, 3, 1983; minimum, 0.0°C Jan. 20, 1985.

EXTREMES FOR CURRENT PERIOD.--
SPECIFIC CONDUCTANCE: Maximum, 208 microsiemens July 24; minimum, 23 microsiemens June 7.
WATER TEMPERATURE: Maximum, 30.0°C July 31; minimum, 0.0°C Jan. 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)
APR 25...	1240	1.8	136	7.1	20.0	--	7	2.0	28	4.6
SEP 23...	1015	.77	160	6.7	16.0	8.2	5	1.1	52	4.6

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)
APR 25...	5.7	<.2	112	.50	.090	.110	1	2	<100	<100
SEP 23...	6.0	.4	103	.26	.040	.040	<1	1	<100	<100

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
APR 25...	<1	<1	1	<1	<50	<50	1600	390	2	<1
SEP 23...	<1	<1	<1	<1	<50	<50	610	<250	<1	1

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
APR 25...	120	130	.2	.2	1	<1	<1	<1	<50	<50
SEP 23...	40	50	<.2	<.2	1	2	<1	<1	<50	<50

02146579 IRVINS CREEK AT LEBANON ROAD NEAR MINT HILL, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	127	94	117	164	160	163	157	151	152	141	134	139
2	142	130	138	167	158	162	166	72	140	145	89	126
3	148	144	145	161	157	159	134	76	112	113	95	104
4	158	150	152	177	153	159	146	134	140	116	61	82
5	159	152	154	157	150	154	150	69	110	87	77	82
6	172	155	162	173	154	162	121	110	118	92	87	89
7	162	157	159	156	153	155	127	121	123	96	90	92
8	161	157	159	155	148	152	138	126	131	96	90	93
9	164	157	161	151	146	149	138	132	134	96	92	93
10	165	159	161	153	146	149	136	132	134	94	91	92
11	166	160	163	163	145	151	138	136	137	103	93	97
12	169	161	166	153	147	150	148	138	143	110	101	105
13	165	161	163	155	150	153	147	140	142	117	104	110
14	166	160	162	154	149	150	146	141	143	122	113	117
15	166	159	162	157	151	154	145	142	143	128	121	124
16	166	160	161	154	151	153	146	142	144	132	127	130
17	166	162	163	171	152	159	146	141	143	133	124	128
18	165	162	164	162	152	155	146	142	143	133	126	129
19	166	162	164	157	154	155	145	141	142	136	113	127
20	166	162	164	158	155	156	146	142	145	112	101	105
21	169	164	167	158	154	156	149	142	146	102	95	98
22	192	153	166	159	153	154	151	139	143	107	94	100
23	175	164	168	160	152	154	148	139	143	97	91	94
24	174	170	171	158	150	153	146	138	141	102	91	98
25	173	165	169	156	149	152	141	136	139	94	84	88
26	172	161	166	155	149	151	144	135	138	87	84	85
27	168	160	163	155	150	152	148	135	139	88	84	86
28	170	149	164	173	144	155	139	134	137	85	81	83
29	172	159	163	167	158	164	144	137	140	145	81	92
30	177	163	169	162	154	158	140	135	139	200	138	165
31	172	162	166	---	---	---	142	134	138	167	52	107
MONTH	192	94	160	177	144	155	166	69	137	200	52	105

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	110	107	108	140	128	135	146	140	144
2	---	---	---	111	108	110	144	129	134	147	142	145
3	---	---	---	114	109	112	136	127	132	148	72	112
4	---	---	---	116	111	114	139	126	134	141	124	131
5	102	53	73	118	112	115	145	128	136	148	136	141
6	61	56	58	122	115	118	140	127	132	146	139	143
7	67	60	64	120	116	118	135	129	133	148	142	146
8	73	68	71	127	116	121	146	131	135	150	145	147
9	77	74	76	135	122	127	139	131	135	149	78	128
10	82	79	80	140	124	130	141	130	134	136	102	123
11	93	61	82	131	120	127	141	128	134	144	121	131
12	68	63	65	141	119	128	143	132	136	140	124	132
13	75	69	72	134	121	128	149	135	143	147	138	142
14	80	77	78	133	122	129	157	142	147	149	143	146
15	84	81	82	139	121	130	149	115	138	152	41	142
16	87	85	86	135	124	130	134	76	108	84	41	73
17	90	88	89	135	122	130	112	99	105	86	60	73
18	104	90	93	142	125	131	116	113	115	105	86	96
19	105	96	99	138	124	131	128	118	123	119	105	111
20	104	101	102	136	122	130	134	128	130	135	119	125
21	105	102	103	144	124	131	135	131	133	137	132	134
22	110	105	107	132	111	117	138	134	136	142	135	138
23	110	106	108	118	110	114	141	135	138	144	137	140
24	113	108	111	125	109	116	143	133	138	145	140	142
25	119	103	112	120	111	115	141	132	137	145	136	141
26	111	84	94	121	110	116	145	140	142	152	138	144
27	102	96	99	132	114	122	145	141	144	152	137	146
28	108	104	106	161	120	128	146	142	144	153	137	146
29	---	---	---	137	119	131	145	138	142	151	138	144
30	---	---	---	146	125	135	149	140	144	149	136	145
31	---	---	---	140	127	135	---	---	---	152	134	145
MONTH	119	53	88	161	107	123	157	76	134	153	41	132

02146579 IRVINS CREEK AT LEBANON ROAD NEAR MINT HILL, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	156	137	148	133	28	106	142	114	126	153	142	147
2	157	141	150	92	81	86	163	144	152	155	149	152
3	162	139	150	112	93	101	184	162	169	155	151	153
4	163	65	149	122	110	117	188	159	170	159	153	157
5	126	67	97	127	109	117	189	160	173	160	154	158
6	113	32	87	134	126	129	173	164	170	162	153	159
7	81	23	67	143	136	139	176	161	170	163	153	160
8	83	62	74	148	140	144	205	168	175	164	154	161
9	99	83	90	151	142	147	178	174	176	165	155	161
10	112	100	108	155	145	150	179	169	176	163	154	159
11	126	113	123	159	147	152	181	169	176	167	158	164
12	128	124	126	158	148	154	182	171	178	167	158	163
13	133	127	129	163	110	145	182	169	177	165	157	161
14	135	130	133	154	119	135	183	170	178	165	158	162
15	139	129	133	171	152	158	186	169	179	164	158	160
16	139	93	122	164	154	159	185	103	169	164	158	161
17	130	119	124	167	155	161	130	49	83	162	154	159
18	138	129	133	167	157	163	94	79	87	162	153	159
19	139	133	137	171	157	164	125	94	103	163	154	160
20	142	133	138	172	156	164	126	111	118	164	153	160
21	142	133	138	175	158	168	205	59	93	163	152	158
22	143	133	139	179	162	171	107	87	96	162	153	158
23	143	134	139	182	162	172	126	107	116	162	154	159
24	146	136	140	208	63	148	134	69	103	162	153	159
25	151	141	146	119	78	101	96	75	88	162	154	157
26	150	139	145	116	105	108	96	71	85	160	155	157
27	148	140	146	120	99	111	103	84	94	160	152	156
28	147	138	144	125	108	119	118	103	111	161	153	157
29	161	102	140	149	126	136	133	120	126	161	155	159
30	136	80	104	157	81	139	138	126	135	160	149	156
31	---	---	---	115	101	107	143	128	136	---	---	---
MONTH	163	23	127	208	28	138	205	49	138	167	142	158
YEAR	208	23	134									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	14.0	15.0	21.0	18.5	19.5	9.5	7.0	8.0	15.0	12.0	13.5
2	15.5	11.5	13.5	20.5	17.0	18.5	10.0	5.5	8.0	16.0	14.0	15.0
3	15.5	11.0	12.5	17.0	13.0	14.5	11.0	8.5	10.0	14.5	10.5	12.5
4	17.5	14.5	16.0	13.0	12.5	13.0	8.5	6.5	7.5	10.5	8.0	9.5
5	18.0	14.0	16.0	15.0	13.0	14.0	8.0	7.0	7.5	9.5	7.5	8.5
6	18.5	14.5	16.5	14.0	10.0	12.0	8.0	5.0	7.5	8.5	6.0	7.0
7	18.5	16.0	17.5	10.0	8.0	9.0	5.5	4.0	4.5	8.5	6.0	7.0
8	20.0	16.5	18.0	10.0	7.0	8.5	6.5	2.5	4.5	7.5	5.0	6.5
9	19.5	16.5	18.0	10.5	7.5	9.0	7.0	2.5	5.0	7.0	4.5	6.0
10	20.5	17.0	18.5	12.5	8.0	10.0	7.5	4.5	6.0	6.0	5.0	5.5
11	19.5	16.5	17.5	14.0	11.0	13.0	9.0	6.0	7.5	7.5	4.5	5.5
12	19.0	15.0	17.0	11.0	8.5	9.5	9.5	5.5	7.5	9.5	2.5	4.0
13	18.5	14.5	16.5	8.5	6.0	7.5	11.5	7.5	9.0	5.0	1.0	3.0
14	18.5	14.0	16.0	7.5	5.5	6.5	12.0	9.0	10.0	5.0	1.5	3.5
15	19.5	15.0	17.0	9.5	6.0	8.0	12.0	8.5	10.0	4.5	2.0	3.0
16	20.5	16.5	18.5	13.0	9.0	11.0	13.0	9.0	11.0	4.5	.5	3.0
17	20.0	17.5	19.0	8.5	5.5	7.5	14.0	10.0	12.0	6.5	4.0	5.0
18	20.5	18.5	19.0	10.0	6.0	8.0	13.0	10.0	11.0	7.0	5.0	6.0
19	22.5	18.5	20.0	15.0	10.0	12.5	14.5	10.5	12.5	7.5	5.0	6.0
20	21.5	18.0	19.5	11.0	7.0	9.5	14.5	13.0	13.5	5.5	.0	3.0
21	23.0	20.0	21.0	7.0	5.0	5.5	15.5	13.0	14.0	1.0	.5	.5
22	23.5	21.0	22.0	5.5	4.0	4.5	15.5	11.5	14.0	2.0	.5	1.0
23	23.5	21.5	22.0	6.0	3.0	4.5	11.5	7.5	9.5	2.5	.5	1.0
24	23.5	20.5	22.0	6.5	3.0	4.5	10.0	6.0	8.0	3.5	1.0	2.0
25	22.5	19.5	21.0	7.5	4.0	6.0	12.0	9.0	10.5	4.5	1.5	2.5
26	22.0	18.5	19.5	7.5	4.5	6.5	9.0	7.0	8.0	3.0	.5	1.5
27	20.5	16.5	18.5	11.5	7.5	9.5	11.5	9.0	10.0	3.0	.5	2.0
28	22.5	18.0	20.5	13.5	10.0	12.5	12.0	8.0	10.0	4.0	3.0	3.0
29	23.0	20.5	21.5	9.5	7.0	7.5	14.0	10.0	12.0	6.0	1.5	4.0
30	21.5	18.5	20.0	8.0	4.5	6.5	14.5	11.5	13.0	7.0	4.0	5.5
31	20.5	19.0	19.5	---	---	---	14.5	12.0	13.0	7.5	5.5	6.5
MONTH	23.5	11.0	18.5	21.0	3.0	9.5	15.5	2.5	9.5	16.0	.0	5.0

02146579 IRVINS CREEK AT LEBANON ROAD NEAR MINT HILL, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	10.0	7.0	8.5	21.0	13.5	16.5	22.5	13.5	17.0
2	---	---	---	13.5	8.0	10.5	18.5	10.5	13.5	18.5	17.0	17.5
3	---	---	---	13.5	7.5	10.0	18.5	8.5	13.0	22.0	16.5	18.5
4	---	---	---	15.0	9.5	12.0	22.0	11.0	16.0	21.0	14.0	16.5
5	4.0	3.5	4.0	17.5	12.0	14.0	20.0	14.0	17.0	22.5	12.5	16.5
6	6.0	4.0	5.0	14.0	8.5	10.5	21.0	14.0	16.5	23.5	14.0	18.0
7	6.0	4.0	5.0	12.5	6.0	9.0	20.0	11.5	14.5	22.0	15.0	18.0
8	5.0	2.5	3.5	16.0	7.5	11.5	17.0	9.5	12.5	17.5	14.5	16.0
9	5.5	1.0	3.5	13.5	10.5	13.0	15.5	8.0	11.0	17.0	14.0	15.5
10	7.5	2.0	4.5	15.0	7.5	11.0	15.5	6.5	10.0	21.5	16.0	18.0
11	6.5	2.5	5.0	12.5	9.0	11.0	18.0	8.0	12.5	21.5	17.5	19.0
12	6.0	4.0	4.5	18.0	11.5	14.0	19.0	10.0	14.5	23.5	17.5	20.0
13	6.0	3.0	4.5	16.5	8.0	12.0	19.5	13.5	16.0	25.0	18.5	21.0
14	6.0	2.0	4.0	17.0	10.0	13.5	16.0	13.5	14.5	25.0	18.0	21.0
15	5.5	1.0	3.5	16.5	10.0	12.5	17.5	14.0	15.5	24.0	18.0	20.5
16	6.5	1.0	3.5	12.5	7.5	10.5	16.0	14.5	15.0	24.0	19.0	22.0
17	7.5	2.5	4.5	15.0	10.5	12.0	23.0	14.0	17.5	22.5	18.0	20.0
18	8.0	3.0	5.0	13.0	7.0	9.5	23.5	14.0	18.0	22.0	17.0	19.0
19	7.0	5.0	6.0	13.5	5.0	9.0	24.5	14.5	18.5	23.0	15.0	18.0
20	10.0	6.0	7.5	16.0	7.5	11.0	25.0	14.5	19.0	22.0	15.5	18.5
21	9.0	3.5	6.0	12.5	10.0	11.0	24.5	15.0	19.0	23.0	17.0	19.0
22	11.5	6.0	8.5	9.5	8.0	8.5	24.0	14.5	18.5	22.5	17.5	19.5
23	13.0	8.5	10.5	15.5	8.5	11.5	21.0	16.0	18.5	23.5	17.5	20.0
24	15.5	10.0	12.5	16.0	12.0	13.5	22.5	15.5	18.5	18.5	15.5	17.0
25	13.5	12.0	12.5	16.5	10.5	12.5	24.0	16.0	19.0	21.0	13.5	16.5
26	13.0	10.5	12.5	19.0	9.0	13.5	23.5	14.0	18.0	22.0	14.0	17.5
27	13.5	10.5	12.5	19.0	11.0	14.5	20.5	15.5	18.0	23.5	15.0	18.5
28	13.0	8.0	10.0	22.0	13.0	17.0	24.5	16.5	19.5	21.0	16.0	18.0
29	---	---	---	24.0	16.0	19.5	24.5	16.5	19.5	22.5	17.0	19.0
30	---	---	---	25.0	17.5	20.5	22.5	13.5	17.0	20.0	17.0	18.0
31	---	---	---	24.5	16.5	19.5	---	---	---	23.0	17.0	20.0
MONTH	15.5	1.0	6.5	25.0	5.0	12.5	25.0	6.5	16.0	25.0	12.5	18.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.0	19.0	22.0	24.5	19.0	21.0	29.5	24.5	26.5	24.5	20.0	22.0
2	24.5	18.5	21.0	27.5	24.0	25.0	24.5	21.0	23.0	25.0	20.5	22.5
3	25.5	18.5	22.0	27.5	23.0	25.0	23.5	17.5	20.0	25.0	20.5	22.5
4	27.0	20.0	22.5	26.5	21.5	23.5	23.5	16.5	19.5	25.5	20.5	23.0
5	28.5	21.0	23.0	26.0	22.5	23.5	22.0	16.5	19.0	25.5	21.5	23.0
6	29.0	20.0	24.0	24.5	21.5	23.0	24.0	19.0	21.0	26.0	22.0	23.5
7	26.0	20.5	23.0	26.0	21.5	23.0	24.5	19.5	22.0	26.0	21.5	23.5
8	25.5	21.5	23.0	26.5	19.5	23.0	23.0	21.5	22.0	25.5	22.5	24.0
9	26.0	20.5	23.0	26.5	20.0	23.0	25.0	20.5	22.5	26.5	22.5	24.0
10	26.0	20.5	23.0	26.5	21.5	24.0	25.5	21.0	23.0	26.0	22.5	24.0
11	25.0	21.0	23.5	27.0	21.0	23.5	26.0	20.5	23.0	25.5	23.0	24.0
12	24.5	19.5	22.0	27.0	21.0	23.5	25.0	20.5	23.0	23.5	19.5	21.5
13	22.0	16.0	18.5	26.5	21.5	23.5	26.0	21.5	23.5	19.5	16.0	18.0
14	22.0	14.5	17.5	27.5	21.5	24.0	25.5	21.0	23.0	17.5	13.0	15.0
15	23.5	16.5	19.5	27.5	21.5	24.0	25.5	20.5	23.0	17.5	12.5	14.5
16	24.0	19.5	21.0	27.0	22.5	24.5	26.0	21.0	23.0	17.5	13.5	15.0
17	26.0	19.5	22.0	27.0	22.0	24.0	25.0	21.5	23.0	18.5	13.0	15.5
18	26.5	21.5	23.5	26.0	22.0	23.5	25.0	24.0	24.5	19.5	14.0	16.0
19	24.0	20.5	22.0	27.0	21.0	23.5	27.0	22.0	24.5	20.0	14.0	16.5
20	24.5	18.0	21.0	27.5	22.0	24.0	25.5	22.5	23.5	19.5	14.5	17.0
21	24.5	17.5	20.5	28.0	22.5	24.5	25.5	21.5	24.0	20.0	16.5	18.0
22	25.0	18.0	21.0	27.5	22.5	24.5	26.5	22.5	24.0	21.5	17.0	18.5
23	25.0	19.5	22.0	25.0	22.0	23.5	23.5	21.0	22.0	21.5	17.0	18.5
24	28.0	20.5	23.5	23.0	21.0	21.5	24.5	20.5	22.5	22.0	18.5	20.0
25	28.0	20.5	24.0	25.5	20.5	23.5	25.0	22.0	23.5	19.5	17.5	18.5
26	27.0	22.0	24.5	27.0	23.0	25.0	25.0	23.0	24.0	20.5	17.0	18.5
27	23.5	19.5	21.0	26.5	23.5	24.5	26.0	23.0	24.5	19.0	15.5	17.5
28	23.5	18.5	21.0	25.0	24.0	24.5	26.0	23.0	24.5	17.5	12.5	14.5
29	24.0	19.5	21.5	25.5	23.0	24.0	26.0	22.0	24.0	17.5	12.5	14.5
30	22.0	20.0	21.0	26.5	22.5	24.0	25.5	22.0	23.5	18.5	13.5	15.5
31	---	---	---	30.0	25.0	27.5	25.5	21.5	23.0	---	---	---
MONTH	29.0	14.5	22.0	30.0	19.0	24.0	29.5	16.5	23.0	26.5	12.5	19.5
YEAR	30.0	.0	15.5									

SANTEE RIVER BASIN

02146600 McALPINE CREEK AT SARDIS ROAD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°08'14", long 80°46'05", Mecklenburg County, Hydrologic Unit 03050103, near left bank on downstream end of bridge pier at Sardis Road (Secondary Road 3356), 1.7 mi downstream from Irvins Creek, and 7 mi southeast of City Hall, Charlotte.

DRAINAGE AREA.--39.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1962 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 553.39 ft above National Geodetic Vertical of 1929 (levels by city of Charlotte).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasion miner fluctuation and regulation of unknown origin. Creek channel improved by dredging in 1917 and maintained by the Mecklenburg County Drainage Commission to present time. This drainage basin is adjacent to the city of Charlotte. The drainage basin is urban and has an impervious area of about 15 percent, expected development by 1995, about 22 percent.

COOPERATION.--Chemical and biological data shown in last table were provided by North Carolina Department of Natural Resources and Community Development

AVERAGE DISCHARGE.--23 years, 41.2 ft³/s, 14.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,690 ft³/s Mar. 24, 1979, gage height, 16.7 ft from floodmark; no flow Nov. 15, 1972, result of upstream construction; minimum, not affected by construction, 0.28 ft³/s Oct. 5, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 6, 1962 reached a stage of about 14.0 ft from floodmarks, discharge, 4,150 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0215	2,040	9.86	May 16	0115	2,550	11.18
Feb. 2	0115	1,890	9.42	June 7	2015	2,820	11.76
Apr. 16	1300	2,000	9.73	Aug. 17	2030	*3,100	*12.30

Minimum discharge, 1.6 ft³/s Aug. 15, 16, gage height, 0.92 ft; minimum daily, 1.8 ft³/s Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	3.6	5.0	6.3	721	20	10	6.1	6.1	78	5.8	8.9
2	6.8	3.6	56	80	699	18	9.2	7.3	6.4	53	4.9	7.9
3	5.0	3.2	105	241	86	16	9.2	63	8.7	21	4.1	7.6
4	4.5	16	12	319	41	15	9.0	11	6.3	9.2	3.8	6.9
5	4.4	8.0	162	54	128	15	8.9	7.8	30	11	3.8	6.4
6	4.4	6.1	56	22	161	13	20	6.9	188	7.0	3.5	6.1
7	4.4	4.3	14	16	70	12	9.8	6.4	703	6.4	3.3	5.8
8	4.4	4.1	9.2	12	36	12	8.8	6.7	357	5.7	3.5	5.7
9	3.8	4.1	8.8	11	26	12	8.5	23	29	5.0	4.1	5.5
10	4.3	3.9	7.5	9.9	28	12	8.3	20	17	4.4	3.5	6.6
11	3.7	13	7.4	9.6	53	12	8.6	15	12	9.0	3.0	5.3
12	4.1	5.1	6.8	9.0	173	12	8.8	11	9.8	4.6	2.6	5.7
13	4.1	3.9	6.7	8.6	48	12	8.8	7.4	9.1	67	2.2	4.6
14	4.2	3.6	6.5	8.8	30	11	10	6.5	8.0	22	2.1	4.3
15	3.9	3.7	6.3	8.7	24	11	24	6.3	7.4	6.0	1.8	4.4
16	3.8	3.6	6.3	8.2	23	10	484	706	38	5.7	24	4.3
17	4.1	3.6	6.2	20	21	11	64	293	11	5.7	1580	4.3
18	4.4	3.6	6.2	12	19	10	25	34	8.1	4.0	217	4.1
19	4.7	3.8	6.2	9.8	17	9.6	17	16	6.7	3.8	21	3.9
20	4.6	4.0	6.2	9.5	21	9.9	13	12	6.3	3.5	11	3.7
21	5.4	4.0	6.2	8.1	16	10	11	10	5.7	3.3	e400	3.8
22	18	3.9	7.8	8.1	15	41	9.9	9.0	5.5	4.2	e85	3.8
23	11	4.1	7.0	8.3	14	23	9.1	8.2	5.1	7.5	e15	3.6
24	5.6	4.4	6.3	8.4	13	15	9.9	8.0	5.6	45	246	3.6
25	5.9	4.4	6.2	8.8	38	12	17	7.7	5.6	53	156	3.7
26	4.9	4.4	5.8	8.1	172	12	8.2	6.8	5.1	25	225	3.4
27	4.1	4.4	5.9	7.8	44	11	7.6	6.3	4.3	18	80	3.3
28	4.1	23	5.9	11	26	11	7.5	12	3.7	25	23	2.9
29	4.3	8.9	5.9	13	---	11	6.9	14	43	14	14	2.9
30	3.9	5.4	6.4	9.8	---	11	6.4	6.6	66	8.0	12	2.9
31	3.8	---	6.2	175	---	10	---	6.5	---	8.2	13	---
TOTAL	200.6	171.7	569.9	1141.8	2763	420.5	858.4	1360.5	1617.5	543.2	3174.0	145.9
MEAN	6.47	5.72	18.4	36.8	98.7	13.6	28.6	43.9	53.9	17.5	102	4.86
MAX	46	23	162	319	721	41	484	706	703	78	1580	8.9
MIN	3.7	3.2	5.0	6.3	13	9.6	6.4	6.1	3.7	3.3	1.8	2.9
CFSM	.16	.14	.46	.93	2.49	.34	.72	1.11	1.36	.44	2.58	.12
IN.	.19	.16	.54	1.07	2.60	.40	.81	1.28	1.52	.51	2.98	.14

CAL YR 1984 TOTAL 18614.8 MEAN 50.9 MAX 1180 MIN 2.2 CFSM 1.29 IN. 17.49
WTR YR 1985 TOTAL 12967.0 MEAN 35.5 MAX 1580 MIN 1.8 CFSM .90 IN. 12.18

e Estimated

02146600 MCALPINE CREEK AT SARDIS ROAD NEAR CHARLOTTE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/29	1520	WATER	0	1.05	5	130	6.50	23.0		6.4	210
84/11/27	1510	WATER	0	1.03	4	130	7.50	9.0	6.0	11.6	40
84/12/11	1550	WATER	0	1.13	7	120	6.90	7.0		11.3	120
85/01/30	1435	WATER	0	1.19	9	103	6.80	3.0		14.0	190
85/02/26	1445	WATER	0	2.03	99	106	6.90	14.0	75.0	10.7	1100
85/03/26	1400	WATER	0			129	7.10	13.0		12.4	40
85/04/29	1335	WATER	0.1	1.13	7						
85/05/28	1350	WATER	0	1.09	5	84	7.40	22.0	8.1	8.6	160
85/06/24	1350	WATER	0	1.06	4	150	7.00	28.0		7.0	170
85/07/29	1325	WATER	0	1.26	12	110	6.60	23.0		7.0	820
85/08/26	1340	WATER	0.1	1.89	71	110	6.50	23.0	80.0	8.0	
85/09/25	1335	WATER	0.1	1.02	4	171	6.90	20.0		6.3	210

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	1520	WATER	0	64	11	160					
84/11/27	1510	WATER	0	66	6	100	.03	.010	.200	.070	.040
84/12/11	1550	WATER	0	52	10	130					
85/01/30	1435	WATER	0	47	4	130					
85/02/26	1445	WATER	0	31	30	190	.14	.020	.400	.100	.010
85/03/26	1400	WATER	0	55	4	120					
85/05/28	1350	WATER	0	63	6	150	.03	.030	.300	.040	.010K
85/06/24	1350	WATER	0	60	11	120					
85/07/29	1325	WATER	0	42	44	240					
85/08/26	1340	WATER	0.1	36	24	190	.10	.140	.700	.170	.040
85/09/25	1335	WATER	0.1	75	5	160					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	1510	WATER	0	10K	20K	50K	20	100K	.2K	100K	20K
85/02/26	1445	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20
85/05/28	1350	WATER	0	10K	20K			100K	.2K		20K
85/08/26	1340	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02146700 McMULLEN CREEK AT SHARON VIEW ROAD NEAR CHARLOTTE, NC

LOCATION.--Lat 35°08'27", long 80°49'13", Mecklenburg County, Hydrologic Unit 03050103, on left downstream of culvert wingwall at Sharon View Road (Secondary Road 3673), 3.3 mi south of Queens College, Charlotte, and 6.9 mi upstream from mouth.

DRAINAGE AREA.--6.95 mi².

PERIOD OF RECORD.--April 1962 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 592.91 ft above National Geodetic Vertical Datum of 1929 (Levels by city of Charlotte). Prior to Oct. 13, 1970, at site 73 ft upstream at same datum. Oct. 13, 1970 to Dec. 30, 1971, at site 154 ft downstream at datum 2.00 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Creek channel improved by dredging in 1928. The drainage area is in the eastern part of the city and has an impervious area of about 15 percent.

AVERAGE DISCHARGE.--23 years, 8.00 ft³/s, 15.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,150 ft³/s June 10, 1982, gage height, 10.89 ft, from rating curve extended above 1,400 ft³/s on basis of computation of peak flow through culvert; no flow Aug. 31, Sept. 1, 2, 1962, Sept. 19-23, 1963, Sept. 3, 4, Oct. 5, 1968, Oct. 8, 27, 28, 1970, Mar. 28, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 6, 1962 reached a stage of 7.5 ft, former site and datum, from floodmarks, discharge, 1,040 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	0045	842	6.33	June 7	1930	1,200	7.85
Feb. 2	0015	560	4.98	Aug. 17	1200	*2,160	*9.78
May 16	0230	2,070	9.64				

Minimum discharge, 0.18 ft³/s part of each day Oct. 6-8, 27, 28, Nov. 1, 3, 4, Aug. 11-14, Sept. 21-23, 25-28, 30; minimum gage height, 0.72 ft Oct. 11, 12, 13, 17, 21, 22; minimum daily 0.18 ft³/s Oct. 7, Aug. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	.21	.33	.43	194	2.5	1.2	.64	.73	24	.74	1.1
2	.54	.21	39	35	114	2.2	1.1	2.6	.64	16	.42	1.0
3	.29	.20	19	75	10	1.8	1.0	25	2.1	2.7	.33	1.1
4	.21	8.6	1.0	66	4.1	1.8	.96	1.2	.73	.96	.30	.77
5	.21	1.0	63	5.4	37	1.7	.97	.84	5.3	1.3	.26	.70
6	.19	.40	6.0	2.2	25	1.4	5.9	.74	42	.66	.25	.64
7	.18	.23	1.3	1.5	7.7	1.4	1.1	.73	155	.64	.22	.57
8	.19	.21	.86	1.3	3.5	1.4	.96	.81	17	.53	1.0	.55
9	.21	.21	.80	1.0	2.6	1.4	.92	6.2	2.3	.45	.66	.54
10	.86	.25	.73	1.0	2.2	1.3	.89	2.5	1.3	2.1	.24	.50
11	.34	6.7	.74	.97	24	1.2	.98	3.2	1.0	4.9	.21	.42
12	.25	.54	.64	.89	30	1.3	.95	1.3	.96	.48	.16	.38
13	.23	.24	.65	.84	4.7	1.2	.94	.77	.69	26	.18	.33
14	.26	.22	.64	.84	5.2	1.2	1.2	.66	.62	2.6	.19	.27
15	.27	.21	.56	.77	2.4	1.1	9.0	16	.65	.64	.33	.30
16	.26	.21	.52	.74	1.9	1.1	34	266	12	.61	6.6	.28
17	.29	.21	.55	6.2	1.8	1.2	3.3	47	1.1	.62	463	.25
18	.33	.25	.76	1.4	1.6	1.0	1.5	3.3	.74	.36	9.5	.22
19	.33	.34	.59	.95	1.8	.97	1.2	1.6	.68	.31	1.7	.23
20	.29	.43	.57	1.0	3.5	1.1	1.4	1.3	.55	.26	1.1	.22
21	.30	.24	.52	1.1	1.7	1.5	1.4	1.1	.57	.26	43	.20
22	16	.26	1.1	1.0	1.6	12	1.2	1.1	.62	1.7	2.2	.21
23	1.2	.26	.71	1.1	1.6	2.8	1.3	1.1	.62	1.3	1.0	.21
24	.71	.32	.47	1.0	1.6	1.5	2.7	.92	15	17	70	.22
25	.52	.31	.44	.90	31	1.2	4.0	.87	2.3	9.9	19	.19
26	.23	.30	.42	.79	40	1.1	.96	.80	.64	9.5	16	.19
27	.20	.31	.42	.75	5.5	1.1	.79	.76	.44	2.3	4.4	.19
28	.20	9.2	.42	2.8	3.2	1.1	.90	9.7	.33	8.3	1.6	.22
29	.23	.98	.44	2.2	---	1.1	.69	2.4	31	2.8	1.3	.25
30	.27	.46	.46	1.1	---	1.1	.66	.91	14	.89	2.4	.21
31	.23	---	.43	62	---	1.1	---	.85	---	.62	1.5	---
TOTAL	31.92	33.51	144.07	278.17	563.2	53.87	84.07	402.90	311.61	140.69	649.81	12.46
MEAN	1.03	1.12	4.65	8.97	20.1	1.74	2.80	13.0	10.4	4.54	21.0	.42
MAX	16	9.2	63	75	194	12	34	266	155	26	463	1.1
MIN	.18	.20	.33	.43	1.6	.97	.66	.64	.33	.26	.18	.19
CFSM	.15	.16	.67	1.29	2.89	.25	.40	1.87	1.50	.65	3.02	.06
IN.	.17	.18	.77	1.49	3.01	.29	.45	2.16	1.67	.75	3.48	.07

CAL YR 1984	TOTAL	3619.48	MEAN	9.89	MAX	368	MIN	.18	CFSM	1.42	IN.	19.37
WTR YR 1985	TOTAL	2706.28	MEAN	7.41	MAX	463	MIN	.18	CFSM	1.07	IN.	14.49

02146750 McALPINE CREEK BELOW McMULLEN CREEK NEAR PINEVILLE, NC

LOCATION.--Lat 35°03'59", long 80°52'12", Mecklenburg County, Hydrologic Unit, 03050103, on right bank at waste treatment plant of Charlotte, 150 ft downstream from McMullen Creek, 735 ft upstream from effluent outfall, and 2.1 mi south of Pineville.

DRAINAGE AREA.--92.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 516.29 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977 at datum 1.00 ft higher.

REMARKS.--Records good except those above 800 ft^3/s, which are fair, and those for period of estimated discharges, which are poor. Records for periods of heavy overbank flow may be affected by variable backwater not adequately defined. The drainage area is the eastern side of the city of Charlotte and has an impervious area of about 12 percent.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--11 years, 142 ft^3/s, 20.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,340 ft^3/s Dec. 6, 1983, gage height, 12.95 ft; minimum, 0.45 ft^3/s Sept. 30, 1983; minimum daily, 0.46 ft^3/s Sept. 30, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1964, about 12.9 ft, former datum, Apr. 1, 1973, from information by waste treatment plant operator.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	1045	3,920	9.51	Aug. 17	2200	*7,130	*12.80

Minimum discharge, 4.5 ft^3/s Sept. 29; minimum gage height, 1.13 ft Aug. 14, 15, 16; minimum daily, 4.8 ft^3/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381	7.5	16	14	2550	e53	25	15	13	102	19	26
2	23	7.3	103	222	3120	52	23	18	12	376	17	22
3	13	7.0	856	1240	1120	45	22	199	15	119	12	20
4	10	58	76	1590	323	41	22	40	17	28	10	19
5	8.9	e30	631	778	558	39	21	23	43	23	9.4	17
6	8.4	e12	712	147	1240	35	56	18	178	18	8.6	15
7	8.0	e9.0	83	75	662	31	26	16	760	15	8.1	15
8	8.7	e8.5	39	57	203	32	21	15	2260	12	8.3	15
9	8.2	e8.0	31	e41	115	32	20	20	312	10	10	15
10	7.6	e8.0	27	e34	97	31	19	67	85	8.8	8.2	14
11	7.2	e50	25	e32	80	30	19	35	93	49	7.2	14
12	7.0	e20	21	29	1090	31	19	31	[illegible]	14	14	12
13	6.8	e9.0	21	26	349	30	19	19	[illegible]	103	5.9	11
14	6.9	e8.5	19	25	146	28	21	16	24	487	5.1	8.4
15	6.9	e8.2	18	24	103	27	32	14	21	33	5.7	8.0
16	7.1	e8.2	18	22	76	25	840	2000	111	19	5.2	8.3
17	6.6	e8.2	18	54	70	27	1130	1470	71	87	3040	9.1
18	7.8	e8.2	17	43	62	26	102	288	22	16	3990	8.9
19	7.5	e8.4	16	29	57	24	46	65	17	12	295	8.0
20	7.5	8.6	16	25	69	24	34	38	15	12	60	7.3
21	7.7	8.1	16	21	60	25	30	29	13	11	532	6.9
22	61	8.5	18	21	50	115	27	24	12	14	386	6.7
23	85	9.0	21	21	49	75	24	21	11	21	48	6.4
24	16	9.4	15	23	48	42	26	20	47	25	546	6.2
25	11	9.9	15	24	52	34	65	19	70	258	1110	6.2
26	11	9.6	14	25	875	29	27	16	13	107	1160	6.8
27	8.2	9.6	14	23	224	29	21	15	10	53	1060	6.6
28	7.7	104	14	25	e76	28	20	18	8.2	80	110	5.7
29	8.6	97	14	41	---	28	19	58	7.7	186	51	4.9
30	8.3	23	14	26	---	27	16	17	275	38	35	4.8
31	8.0	---	14	741	---	26	---	15	---	24	38	---
TOTAL	780.6	580.7	2932	5498	13524	1121	2792	4659	4597.9	2360.8	12614.7	334.2
MEAN	25.2	19.4	94.6	177	483	36.2	93.1	150	153	76.2	407	11.1
MAX	381	104	856	1590	3120	115	1130	2000	2260	487	3990	26
MIN	6.6	7.0	14	14	48	24	16	14	7.7	8.8	5.1	4.8
CFSM	.27	.21	1.02	1.92	5.23	.39	1.01	1.62	1.66	.82	4.40	.12
IN.	.31	.23	1.18	2.21	5.44	.45	1.12	1.88	1.85	.95	5.08	.13

CAL YR 1984	TOTAL	72956.1	MEAN	199	MAX	5340	MIN	4.7	CFSM 2.15	IN.	29.37
WTR YR 1985	TOTAL	51794.9	MEAN	142	MAX	3990	MIN	4.8	CFSM 1.54	IN.	20.85

e Estimated

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/29	1200	WATER	0	1.32	9	234	6.50	22.0		5.1	220
84/11/27	1150	WATER	0	1.45	9	180	7.40	8.0	4.6	9.6	10K
84/12/11	1225	WATER	0	1.73	26	100	6.90	7.0		11.6	280
85/01/30	1130	WATER	0	1.74	27	146	6.80	3.0		13.2	380
85/02/25	1320	WATER	0	2.00	42	166	7.10	15.0	17.0	9.6	190
85/03/28	1300	WATER	0	1.73	26	197	7.10	17.0		9.8	30
85/04/23	1315	WATER	0.1	1.67	23						
85/05/22	1325	WATER	0	1.66	23	242	7.20	22.0	11.0	6.6	860
85/06/25	1310	WATER	0	1.87	34	132	6.60	24.0		5.6	13000
85/07/23	1315	WATER	0	1.69	26	125	6.70	25.0		6.7	3700
85/08/21	1310	WATER	0.1	3.33	216	210	7.10	24.0	130.0	7.0	300
85/09/19	1240	WATER	0.1	1.29	8	243	6.70	17.0		8.0	180

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	1200	WATER	0	86	5	200	.03	.060	.300	.070	.020
84/11/27	1150	WATER	0	77	2	180	.02	.060	.100	.030	.010
84/12/11	1225	WATER	0	62	6	260	.22	.090	.200	.060	.020
85/01/30	1130	WATER	0	55	6	160					
85/02/25	1320	WATER	0	57	13	160	.04	.020	.200	.060	.010
85/03/28	1300	WATER	0	69	5	150					
85/05/22	1325	WATER	0	76	13	190	.12	.110	.400	.060	.020
85/06/25	1310	WATER	0	39	48	150					
85/07/23	1315	WATER	0	70	190	350					
85/08/21	1310	WATER	0.1	63	390	610	4.50	.600	2.300	3.100	2.000
85/09/19	1240	WATER	0.1	95	4	220					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	1150	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/25	1320	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/22	1325	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/21	1310	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	30

K Less than noted value.

02146900 TWELVE MILE CREEK NEAR WAXHAW, NC

LOCATION.--Lat 34°57'08", long 80°45'21", Union County, Hydrologic Unit 03050103, on left bank 90 ft upstream from bridge on State Highway 16, 680 ft downstream from West Fork Twelve Mile Creek, and 2.5 mi north of Waxhaw.

DRAINAGE AREA.--76.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-60. October 1960 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 489.04 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 13, 1962, water-stage recorder at site 70 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--25 years, 73.4 ft³/s, 13.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,700 ft³/s Apr. 1, 1973, gage height, 19.92 ft; no flow Oct. 6, 1968, Oct. 7-15, 1970, Oct. 1-22, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1900, 23.6 ft Sept. 7, 1949, from floodmarks. No flow observed on Oct. 6, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 2	1430	2,440	13.54	Aug. 18	0800	*2,490	*13.66

Minimum discharge, 0.14 ft³/s Aug. 16, gage height, 1.12 ft; minimum daily, 0.21 ft³/s Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	3.0	6.9	6.5	275	29	19	9.1	5.7	6.7	12	15
2	9.3	3.0	7.1	7.6	2080	52	18	9.1	5.5	5.4	7.6	11
3	6.6	2.9	81	153	407	47	17	11	5.2	4.5	5.3	9.4
4	5.2	4.2	20	445	102	37	17	12	5.1	3.4	4.2	8.2
5	4.1	6.8	75	134	156	32	17	10	8.2	4.7	3.7	8.0
6	3.2	6.2	128	36	990	31	20	9.2	45	3.2	2.1	6.8
7	2.7	5.0	23	23	243	28	19	8.6	15	4.9	.96	6.0
8	2.6	3.9	13	18	93	26	17	7.9	329	3.9	.86	5.5
9	2.7	3.7	11	15	61	26	15	8.2	25	2.6	.84	5.0
10	2.6	4.0	9.7	13	49	25	15	9.3	10	1.9	.89	4.6
11	2.3	5.8	9.0	13	46	23	15	9.8	7.3	7.8	.80	4.2
12	2.3	6.7	8.3	12	319	22	15	9.9	5.9	3.4	.68	3.7
13	2.2	5.3	7.9	12	101	20	15	8.9	5.1	2.2	.55	3.4
14	2.1	4.4	7.4	11	58	21	15	7.9	4.2	4.3	.42	2.9
15	2.2	4.1	7.0	11	46	20	16	7.0	3.9	3.0	.32	2.6
16	1.9	4.3	6.9	11	39	19	39	70	5.0	2.5	.21	2.5
17	1.8	4.4	6.8	12	35	20	48	38	4.8	2.4	633	2.5
18	1.9	4.0	6.8	15	32	19	26	21	3.9	1.8	1410	2.4
19	2.0	4.4	6.7	13	31	19	20	11	3.4	1.2	51	2.2
20	2.1	4.8	6.8	12	37	19	18	8.4	3.0	1.0	23	2.0
21	2.1	4.8	6.7	11	37	19	15	7.7	2.6	.87	66	1.9
22	4.1	3.9	7.0	11	31	32	14	7.0	2.3	.92	38	1.9
23	14	4.1	7.3	11	31	39	13	6.6	2.1	11	16	1.9
24	7.9	4.5	6.9	11	31	29	13	6.2	2.6	4.5	74	1.8
25	6.5	4.9	6.8	11	31	25	13	6.0	3.3	11	204	1.7
26	4.8	4.9	7.2	11	31	21	12	5.7	2.1	12	309	1.7
27	3.9	4.9	6.5	10	31	20	11	5.3	1.5	25	258	1.4
28	3.4	6.2	6.5	11	30	20	11	5.3	1.5	12	43	1.1
29	3.2	10	6.5	12	---	20	10	5.8	3.6	34	26	1.0
30	3.1	8.4	6.5	12	---	20	9.5	5.8	20	14	19	1.2
31	3.0	---	6.7	109	---	19	---	5.0	---	8.4	16	---
TOTAL	129.8	147.5	522.9	1193.1	5453	799	522.5	353.5	549.8	204.49	3227.43	123.5
MEAN	4.19	4.92	16.9	38.5	195	25.8	17.4	11.4	18.3	6.60	104	4.12
MAX	14	10	128	445	2080	52	48	70	329	34	1410	15
MIN	1.8	2.9	6.5	6.5	30	19	9.5	5.3	1.5	.87	.21	1.0
CFSM	.05	.06	.22	.50	2.55	.34	.23	.15	.24	.09	1.36	.05
IN.	.06	.07	.25	.58	2.65	.39	.25	.17	.27	.10	1.57	.06

CAL YR 1984 TOTAL 38095.4 MEAN 104 MAX 3880 MIN 1.8 CFSM 1.36 IN. 18.52
WTR YR 1985 TOTAL 13226.52 MEAN 36.2 MAX 2080 MIN .21 CFSM .47 IN. 6.43

02146900 TWELVE MILE CREEK NEAR WAXHAW, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/29	1450	WATER	0	1.51	4	126	6.40	21.0		4.8	60
84/11/27	1415	WATER	0	1.55	5	103	7.20	8.0	4.3	10.7	40
84/12/11	1505	WATER	0	1.76	10	83	6.60	7.0		9.6	350
85/01/30	1355	WATER	0	1.80	14	92	6.80	2.0		14.0	200
85/02/26	1400	WATER	0	2.13	26	100	7.10	14.0	24.0	9.9	1000
85/03/26	1320	WATER	0	1.90	18	103	6.70	11.0		12.6	70
85/04/29	1300	WATER	0	1.74	9	111	6.80	18.0		9.0	220
85/05/28	1255	WATER	0	1.82	12	125	6.90	17.0	27.0	7.2	210
85/06/24	1310	WATER	0	1.82	12	124	6.60	23.0		6.1	300
85/07/29	1230	WATER	0	2.29	43	97	6.30	22.0		6.4	2600
85/08/26	1245	WATER	0.1	3.76	225	75	6.20	23.0	350.0	7.8	
85/09/25	1240	WATER	0.1	1.32	1	122	6.60	18.0		6.2	460

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	1450	WATER	0	43	2	100					
84/11/27	1415	WATER	0	38	1	130	.01K	.010	.200	.020	.010K
84/12/11	1505	WATER	0	22	4	100					
85/01/30	1355	WATER	0	33	1K	110					
85/02/26	1400	WATER	0	25	10	250	.22	.020	.200	.050	.010
85/03/26	1320	WATER	0	27	3	110					
85/04/29	1300	WATER	0	40	1	250					
85/05/28	1255	WATER	0	37	10	160	.43	.080	.300	.090	.010
85/06/24	1310	WATER	0	45	6	100					
85/07/29	1230	WATER	0	24	220	430					
85/08/26	1245	WATER	0.1	16	410	570	.10	.040	.900	.290	.010
85/09/25	1240	WATER	0.1	40	1	140					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	1415	WATER	0	10K	20K	50K	20	100K	.2K	100K	20K
85/02/26	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/28	1255	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/26	1245	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02149000 COVE CREEK NEAR LAKE LURE, NC

LOCATION.--Lat 35°25'24", long 82°06'42", Rutherford County, Hydrologic Unit 03050105, on left bank 40 ft upstream from bridge on U.S. Highways 64 and 74, 1.0 mi upstream from mouth, and 5 mi east of town of Lake Lure.

DRAINAGE AREA.--79.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-50. October 1950 to current year. Monthly discharge only for some periods, published in WSP 1723.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.4 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 20, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--35 years, 137 ft³/s, 23.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s June 5, 1957, gage height, 18.53 ft; minimum, 21 ft³/s Sept. 8, 9, 28, 30, Oct. 1-3, 5-7, 11-13, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 23 ft, from records of North Carolina State Highway Commission.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 12	0400	1,500	6.91	Aug. 17	1700	*2,100	*8.60

Minimum discharge, 29 ft³/s Jan. 21, gage height, 1.87 ft, result of freezeup, minimum daily, 33 ft³/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	84	92	77	287	104	79	75	54	59	206	86
2	87	83	90	91	399	102	74	84	54	57	126	75
3	85	81	100	167	219	98	74	84	60	49	100	69
4	83	101	88	192	157	96	73	74	52	52	82	64
5	81	96	123	149	148	94	73	73	79	54	72	60
6	80	85	139	120	147	90	109	71	58	50	67	69
7	81	81	111	111	140	89	82	69	76	56	79	79
8	83	78	101	104	127	88	78	72	109	45	107	61
9	84	78	96	100	119	89	77	79	61	40	90	96
10	85	79	93	97	115	85	76	79	54	41	75	102
11	82	129	90	95	126	84	75	79	51	41	88	75
12	80	90	89	90	765	84	74	75	55	37	97	80
13	78	83	88	85	264	82	77	74	48	69	72	71
14	77	81	86	85	189	82	94	73	46	44	62	63
15	77	80	85	84	158	81	247	67	46	39	57	58
16	75	79	84	82	141	80	303	66	47	42	54	56
17	75	77	84	85	131	81	237	78	46	40	892	54
18	77	76	83	84	123	78	163	67	45	36	400	50
19	76	81	82	83	119	76	138	62	42	36	176	49
20	79	78	83	80	114	76	123	61	39	34	129	47
21	93	76	84	e69	108	76	113	60	38	33	109	47
22	123	76	85	e84	105	123	106	59	37	46	92	47
23	105	76	82	e84	103	113	101	58	37	81	83	46
24	112	76	80	e80	101	98	101	60	40	259	84	49
25	98	76	81	e78	108	89	100	62	60	277	158	47
26	88	76	78	e80	136	84	86	55	43	222	110	46
27	83	75	78	e82	114	83	85	54	38	122	93	47
28	106	196	78	86	107	82	85	53	37	105	83	46
29	107	119	76	85	---	82	81	55	46	144	159	44
30	91	98	77	82	---	80	77	61	93	158	185	44
31	85	---	78	106	---	78	---	59	---	220	105	---
TOTAL	2725	2644	2764	2977	4870	2727	3261	2098	1591	2588	4292	1827
MEAN	87.9	88.1	89.2	96.0	174	88.0	109	67.7	53.0	83.5	138	60.9
MAX	123	196	139	192	765	123	303	84	109	277	892	102
MIN	75	75	76	69	101	76	73	53	37	33	54	44
CFSM	1.11	1.12	1.13	1.22	2.20	1.11	1.38	.86	.67	1.06	1.75	.77
IN.	1.28	1.25	1.30	1.40	2.29	1.28	1.54	.99	.75	1.22	2.02	.86

CAL YR 1984	TOTAL	64549	MEAN	176	MAX	1200	MIN	75	CFSM	2.23	IN. 30.40
WTR YR 1985	TOTAL	34364	MEAN	94.1	MAX	892	MIN	33	CFSM	1.19	IN. 16.18

e Estimated

02149000 COVE CREEK NEAR LAKE LURE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/29	1405	WATER	0	2.23	80	30	6.80	1.0		13.4	10K
85/02/15	1145	WATER	0	2.60	157		7.20	1.0	9.2	11.8	40
85/03/28	1415	WATER	0	2.22	82	35	7.20	16.0		11.2	10
85/04/17	1440	WATER	0	2.85	217	35	6.90	16.0		10.2	370
85/05/15	1445	WATER	0	2.10	74	42	7.10	22.5	4.8	8.8	50
85/05/15	1445	WATER	0.1	2.10	74						
85/06/13	1400	WATER	0	2.00	49	39	7.10	20.0		9.2	110
85/07/17	1530	WATER	0	1.95	42	41	7.80	24.0		8.3	130
85/08/13	1415	WATER	0.1	2.14	69	52	7.40	23.0	16.0	7.7	230
85/09/17	1500	WATER	0.1	2.04	55	38	7.10	17.0		10.4	90

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/29	1405	WATER	0	12	6	42					
85/02/15	1145	WATER	0		11	53	.20	.020	.100K	.030	.010K
85/03/28	1415	WATER	0	14	2	47					
85/04/17	1440	WATER	0	10	40	75					
85/05/15	1445	WATER	0	16	12	65	.13	.020	.100	.040	.010K
85/06/13	1400	WATER	0	17	13	74					
85/07/17	1530	WATER	0	17	13	84					
85/08/13	1415	WATER	0.1	16	23	87	.13	.030	.400	.040	.010K
85/09/17	1500	WATER	0.1	15	3	67					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/15	1145	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/15	1445	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/13	1415	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02151000 SECOND BROAD RIVER AT CLIFFSIDE, NC

LOCATION.--Lat 35°14'08", long 81°45'57", Rutherford County, Hydrologic Unit 03050105, on left bank 0.2 mi downstream from dam at Cliffside Mills, at Cliffside, and 1.3 mi upstream from mouth.

DRAINAGE AREA.--220 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1925 to current year.

REVISED RECORDS.--WSP 892: 1928(M). WSP 1553: 1935-39(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 670.5 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).

REMARKS.--No estimated daily discharges. Records good. Considerable diurnal fluctuation and some low-flow regulation by mills above station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--60 years, 313 ft³/s, 19.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s Aug. 14, 1940, gage height, 17.93 ft; minimum, 4 ft³/s Sept. 27, 1935, Aug. 3, 1937, July 24, 1943; minimum daily, 6 ft³/s June 9, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	1900	*3,330	*5.81	No other peak greater than base discharge.			

Minimum discharge, 13 ft³/s Oct. 15, gage height, 0.86 ft; minimum daily, 59 ft³/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	201	213	192	923	300	217	184	137	175	234	214
2	226	199	213	196	1390	284	203	151	91	118	239	201
3	173	182	268	320	891	266	197	208	152	115	183	202
4	205	220	240	627	534	260	200	189	140	107	125	151
5	155	205	275	499	445	264	197	125	104	118	169	156
6	171	214	440	355	486	249	207	176	191	116	137	153
7	176	198	325	300	428	226	213	166	146	100	130	167
8	219	192	263	271	375	232	224	169	216	112	144	117
9	169	195	247	253	331	217	194	165	158	92	145	179
10	203	160	237	238	307	227	195	177	141	94	142	158
11	193	230	233	233	301	242	194	148	144	125	141	143
12	174	238	216	217	848	213	187	198	126	106	139	151
13	147	208	220	217	711	224	192	223	118	89	130	165
14	167	197	216	226	489	210	165	156	109	79	122	143
15	211	192	187	214	396	225	224	169	110	121	105	98
16	140	199	203	210	347	210	251	142	133	92	111	163
17	222	186	220	206	311	187	278	187	114	107	1100	134
18	96	156	217	220	295	230	253	138	113	94	1600	93
19	175	208	180	192	281	203	233	157	107	79	470	133
20	173	193	215	203	280	203	199	142	100	90	298	118
21	178	195	211	137	263	199	198	138	98	59	242	120
22	265	179	188	202	252	220	217	162	98	95	235	125
23	244	182	203	227	243	298	186	133	102	106	193	117
24	261	151	198	212	244	248	194	143	86	125	159	118
25	233	182	197	219	253	233	196	143	108	287	624	118
26	206	212	192	175	438	230	209	139	137	416	506	117
27	175	179	196	180	383	214	149	140	87	264	371	118
28	192	286	192	222	327	210	177	123	99	229	283	123
29	233	365	192	205	---	208	208	122	89	240	245	85
30	212	245	193	200	---	184	147	138	88	186	262	130
31	202	---	225	212	---	200	---	131	---	158	284	---
TOTAL	6059	6149	7015	7580	12772	7116	6104	4882	3642	4294	9268	4210
MEAN	195	205	226	245	456	230	203	157	121	139	299	140
MAX	265	365	440	627	1390	300	278	223	216	416	1600	214
MIN	96	151	180	137	243	184	147	122	86	59	105	85
CFSM	.89	.93	1.03	1.11	2.07	1.05	.92	.71	.55	.63	1.36	.64
IN.	1.02	1.04	1.19	1.28	2.16	1.20	1.03	.83	.62	.73	1.57	.71

CAL YR 1984 TOTAL 146612 MEAN 401 MAX 4680 MIN 96 CFSM 1.82 IN. 24.79
WTR YR 1985 TOTAL 79091 MEAN 217 MAX 1600 MIN 59 CFSM .99 IN. 13.37

02151000 SECOND BROAD RIVER AT CLIFFSIDE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/31	1110	WATER	0	1.68	236	110	6.90	19.0		8.0	190
84/11/27	1040	WATER	0	1.62	212	79	6.90	7.0	4.7	10.6	90
84/12/12	1600	WATER	0	1.66	228	94	6.80	8.0		11.3	90
85/01/29	1300	WATER	0	1.68	236	89	6.80	1.0		12.6	80
85/02/15	1015	WATER	0	2.01	390	66	7.10	2.0	20.0	11.4	30
85/03/28	1315	WATER	0	1.68	236	130	7.00	15.0		10.4	30
85/04/17	1220	WATER	0	1.79	282	108	7.00	15.0		9.8	1600
85/05/15	1240	WATER	0	1.68	236	154	7.00	22.0	6.4	7.3	370
85/06/13	1200	WATER	0	1.60	216	200	7.00	22.5		6.9	850
85/07/17	1315	WATER	0	1.03	50	200	7.20	25.0		7.0	1200
85/08/13	1230	WATER	0.1	.95	37	120	7.30	24.5	9.8	7.4	110
85/09/17	1300	WATER	0.1	1.25	104	100	7.00	17.5		9.6	95

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/31	1110	WATER	0	22	11	120					
84/11/27	1040	WATER	0	19	3	71	.31	.120	.200	.090	.040
84/12/12	1600	WATER	0	20	4	68					
85/01/29	1300	WATER	0	19	4	85					
85/02/15	1015	WATER	0		24	92	.38	.190	.200	.090	.030
85/03/28	1315	WATER	0	20	5	97					
85/04/17	1220	WATER	0	20	19	90					
85/05/15	1240	WATER	0	24	8	120	.49	.150	.500	.150	.070
85/06/13	1200	WATER	0	26	7	150					
85/07/17	1315	WATER	0	28	7	160					
85/08/13	1230	WATER	0.1	23	4	130	.49	.090	.300	.160	.100
85/09/17	1300	WATER	0.1	23	8	120					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/27	1040	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/15	1015	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/15	1240	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/13	1230	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02151500 BROAD RIVER NEAR BOILING SPRINGS, NC

LOCATION.--Lat 35°12'39", long 81°41'52", Cleveland County, Hydrologic Unit 03050105, on right bank 0.5 mi upstream from Sandy Run Creek, 3 mi downstream from Second Broad River, and 3.5 mi southwest of Boiling Springs.

DRAINAGE AREA.--875 mi^2.

PERIOD OF RECORD.--June 1925 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 639.92 ft above National Geodetic Vertical Datum of 1929 (Duke Power Company bench mark). Prior to July 20, 1934, at site 500 ft upstream at datum 1 ft higher.

REMARKS.--No estimated daily discharges. Records good. Considerable diurnal fluctuation and some regulation caused by powerplants above station. Duke Power Company has a telephone telemeter at station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--60 years, 1,511 ft^3/s, 23.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,300 ft^3/s Aug. 16, 1928, gage height, 24.3 ft, former site, present datum; minimum, 40 ft^3/s Oct. 17, 1954, gage height, 1.02 ft; minimum daily, 105 ft^3/s Oct. 10, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 18	0400	*13,600	*9.56	No other peak greater than base discharge.			

Minimum discharge, 258 ft^3/s July 23, gage height, 1.42 ft; minimum daily, 328 ft^3/s July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	1070	1320	864	3330	1390	868	909	718	709	1420	1050
2	1080	1010	1190	972	4750	1290	1010	952	548	574	1160	862
3	959	956	1090	1350	3250	1080	824	1120	593	809	888	901
4	840	848	1450	2650	2220	1030	950	1090	619	644	683	811
5	766	959	1440	2220	1710	1320	872	674	581	812	593	848
6	882	1350	2070	1790	2180	1320	963	699	790	715	803	739
7	869	914	1470	1290	1590	1060	990	842	747	619	696	728
8	886	966	1250	1190	1430	1080	864	862	902	600	720	617
9	993	876	1050	1030	1480	1050	889	925	719	631	903	854
10	961	874	1000	1040	1320	962	968	848	661	524	1010	1140
11	855	955	1180	1020	1150	941	898	966	656	598	703	1100
12	843	1090	1130	1010	3500	1320	893	957	725	566	664	1060
13	779	1080	1030	972	3610	1010	960	1120	517	496	953	911
14	745	1030	1090	992	2430	954	901	1230	448	501	696	774
15	790	1190	1020	976	1900	1000	906	875	520	492	537	997
16	960	995	767	985	1440	996	2770	768	564	484	553	814
17	862	890	1020	976	1330	884	2030	860	554	648	4190	883
18	650	773	984	928	1280	813	1430	837	631	596	9190	830
19	1050	790	989	867	1440	1100	1340	761	576	652	2900	670
20	839	969	978	772	1330	977	1110	699	460	780	1960	579
21	821	894	1010	716	1270	1010	1070	743	385	328	1300	624
22	1160	904	930	1090	1210	1060	1030	787	533	355	915	607
23	1380	817	777	885	1290	1560	1200	754	391	458	855	522
24	1210	888	843	708	1180	1070	1170	752	413	549	1000	550
25	1110	869	862	774	1020	1030	1060	755	536	1440	1640	634
26	1070	777	862	711	1710	1090	1130	530	624	1650	1990	593
27	1020	964	862	601	1930	971	1000	650	630	1270	1610	493
28	975	1550	862	823	1470	990	712	569	478	1010	1220	614
29	1070	2090	891	811	---	956	740	844	463	1130	1020	498
30	1140	1470	701	791	---	963	908	664	457	1490	1260	497
31	1090	---	819	855	---	834	---	630	---	974	1550	---
TOTAL	29715	30808	32937	32659	53750	33111	32456	25672	17439	23104	45582	22800
MEAN	959	1027	1062	1054	1920	1068	1082	828	581	745	1470	760
MAX	1380	2090	2070	2650	4750	1560	2770	1230	902	1650	9190	1140
MIN	650	773	701	601	1020	813	712	530	385	328	537	493
CFSM	1.10	1.17	1.21	1.20	2.19	1.22	1.24	.95	.66	.85	1.68	.87
IN.	1.26	1.31	1.40	1.39	2.29	1.41	1.38	1.09	.74	.98	1.94	.97

CAL YR 1984 TOTAL 659824 MEAN 1803 MAX 17500 MIN 650 CFSM 2.06 IN. 28.05
WTR YR 1985 TOTAL 380033 MEAN 1041 MAX 9190 MIN 328 CFSM 1.19 IN. 16.16

02152100 FIRST BROAD RIVER NEAR CASAR, NC

LOCATION.--Lat 35°29'35", long 81°40'56", Cleveland County, Hydrologic Unit 03050105, on right bank 570 ft upstream from bridge on Secondary Road 1530, 0.5 mi upstream from No Business Creek, and 4.0 mi southwest of Casar.

DRAINAGE AREA.--60.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-56, March 1959 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 890 ft above National Geodetic Vertical Datum of 1929, from topgraphic map.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--26 years, 94.8 ft³/s, 21.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,760 ft³/s Oct. 17, 1975, gage height, 16.70 ft; minimum, 17 ft³/s July 20, 1970, gage height, 0.97 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 and August 1940 reached a stage of about 25 ft, from information by local resident. A discharge of 14.5 ft³/s was measured on Sept. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 25	2400	2730	8.37	Aug. 29	2330	*3250	*9.26
Aug. 17	1800	1940	6.83				

Minimum discharge, 20 ft³/s, June 28, gage height, 0.41 ft.

DISCH RGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	54	64	55	286	79	57	45	34	27	150	142
2	55	53	62	62	407	75	53	44	32	30	86	104
3	53	52	78	121	203	70	53	53	35	27	66	87
4	52	57	66	170	129	65	53	49	31	26	55	80
5	51	61	89	124	111	64	52	45	31	32	49	73
6	50	54	109	91	113	60	67	43	31	28	47	68
7	51	51	80	79	116	58	56	42	34	29	51	64
8	54	51	72	73	101	57	53	40	48	25	48	60
9	53	51	68	69	90	58	52	44	33	23	81	61
10	53	52	65	67	84	57	52	45	29	23	55	56
11	52	74	63	65	79	56	53	44	28	25	54	55
12	49	57	61	63	301	56	53	49	29	24	60	56
13	49	53	60	62	202	54	52	50	27	59	42	52
14	48	52	59	61	134	53	53	45	26	32	38	47
15	48	51	57	60	109	52	66	41	26	30	36	46
16	48	51	57	59	95	52	90	45	27	31	33	45
17	48	50	57	62	86	52	91	47	26	35	626	43
18	49	49	56	64	80	52	74	42	25	28	332	41
19	49	51	56	62	76	52	68	38	24	26	122	40
20	48	51	56	59	75	52	62	36	23	25	83	39
21	56	48	56	e58	71	52	59	35	23	61	69	38
22	83	48	59	e60	66	72	57	35	23	108	61	39
23	60	48	57	e60	65	75	55	34	23	117	53	38
24	72	48	56	e60	64	64	52	35	23	134	61	37
25	59	48	56	e60	63	59	55	37	23	330	394	36
26	55	48	55	e62	91	57	57	33	23	553	228	35
27	53	48	55	e62	111	56	51	31	21	145	158	34
28	54	137	55	e65	91	56	49	30	20	111	118	32
29	67	90	55	e65	---	56	48	31	23	98	346	32
30	62	70	55	64	---	55	46	58	31	81	893	32
31	56	---	55	74	---	54	---	38	---	86	253	---
TOTAL	1719	1708	1949	2218	3499	1830	1739	1284	832	2409	4748	1612
MEAN	55.5	56.9	62.9	71.5	125	59.0	58.0	41.4	27.7	77.7	153	53.7
MAX	83	137	109	170	407	79	91	58	48	553	893	142
MIN	48	48	55	55	63	52	46	30	20	23	33	32
CFSM	.92	.94	1.04	1.18	2.07	.98	.96	.68	.46	1.28	2.53	.89
IN.	1.06	1.05	1.20	1.36	2.15	1.13	1.07	.79	.51	1.48	2.92	.99

CAL YR 1984	TOTAL	43873	MEAN	120	MAX	1590	MIN	46	CFSM	1.98	IN.	26.98
WTR YR 1985	TOTAL	25547	MEAN	70.0	MAX	893	MIN	20	CFSM	1.16	IN.	15.71

e Estimated

SANTEE RIVER BASIN

02152100 FIRST BROAD RIVER NEAR CASAR, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/31	0915	WATER	0	.77	56	35	6.80	17.0		9.0	180
84/11/15	0945	WATER	0	.74	52	34	6.80	7.0	1.4	11.9	60
84/12/12	0920	WATER	0	.76	61	28	6.80	6.0		11.2	30
85/01/29	1110	WATER	0	.81	74	30	7.00	.0		13.4	20
85/02/15	0800	WATER	0	1.13	112	30	6.70	.0	4.3	12.2	100
85/03/28	1100	WATER	0	.74	56	85	6.90	13.0		11.0	20
85/04/17	0830	WATER	0	1.01	96	37	6.60	13.0		10.4	530
85/05/15	0830	WATER	0	.62	38	44	7.00	19.0	3.5	8.5	120
85/06/13	0835	WATER	0	.51	27	38	6.90	18.0		8.6	130
85/07/17	0930	WATER	0	.55	37	42	7.20	21.0		8.1	230
85/08/13	0830	WATER	0.1	.65	45	45	7.20	20.0	1.8	8.0	590
85/09/17	0930	WATER	0.1	.72	53	35	7.10	14.0		10.3	220

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/31	0915	WATER	0	13	6	50					
84/11/15	0945	WATER	0	13	3	45	.02	.050	.100	.010	.010K
84/12/12	0920	WATER	0	12	1K	31					
85/01/29	1110	WATER	0	12	1	45					
85/02/15	0800	WATER	0		2	29	.13	.020	.100	.010	.010K
85/03/28	1100	WATER	0	13	2	38					
85/04/17	0830	WATER	0	13	12	46					
85/05/15	0830	WATER	0	15	2	67	.13	.020	.100	.120	.010K
85/06/13	0835	WATER	0	16	3	59					
85/07/17	0930	WATER	0	16	10	57					
85/08/13	0830	WATER	0.1	15	9	71	.10	.010	.200	.030	.010K
85/09/17	0930	WATER	0.1	15	3	50					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/15	0945	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/15	0800	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/15	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/13	0830	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

02152610 SUGAR BRANCH NEAR BOILING SPRINGS, NC

LOCATION.--Lat 35°15'00", long 81°37'15", Cleveland County, Hydrologic Unit 03050105, on left downstream wingwall of culvert on State Highway 150, 0.5 mi upstream from mouth, and 2.8 mi east of Boiling Springs.

DRAINAGE AREA.--1.42 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1954-68, June 1968 to current year.

REVISED RECORDS.--WDR NC-70-1: 1968(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 696.83 ft above National Geodetic Vertical Datum of 1929. June 10, 1953 to May 31, 1968, crest-stage gage on left bank 31 ft upstream from culvert entrance at datum 16.37 ft higher.

REMARKS.--Records fair.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--17 years, 2.14 ft³/s, 20.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s Oct. 16, 1971, gage height, 6.58 ft, from rating curve extended above 120 ft³/s on basis of computation of peak flow through culvert; minimum, 0.10 ft³/s Sept. 28, Oct. 4, 1983, gage height, 0.86 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	1545	*97	*2.52				

Minimum discharge, 0.17 ft³/s July 10, gage height, 0.95 ft; minimum daily, 0.25 ft³/s July 9, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	1.3	1.1	.91	22	1.9	1.1	.71	.48	.35	.59	e.66
2	.47	1.2	2.1	.98	10	1.8	1.1	.84	.48	.37	.55	e.60
3	.46	1.0	2.6	2.9	3.7	1.7	1.1	1.3	.44	.32	.50	e.54
4	.45	1.1	1.7	10	2.7	1.7	1.1	.77	.52	.28	.47	e.51
5	.45	1.1	6.8	2.8	5.0	1.6	1.0	.74	.58	.28	.45	e.48
6	.45	.95	3.4	2.1	3.5	1.4	1.2	.72	.53	.38	.45	e.48
7	.46	.91	2.0	1.8	2.6	1.4	.98	.70	1.7	.37	.49	e.44
8	.48	.91	1.8	1.6	2.2	1.4	.94	.77	.84	.27	.81	e.42
9	.49	.89	1.5	1.4	1.9	1.4	.93	.84	.54	.25	.54	e.41
10	.48	.91	1.5	1.4	1.8	1.4	.91	.82	.49	.29	.45	e.40
11	.46	1.1	1.4	1.3	3.2	1.4	.93	.79	.48	.47	.42	e.40
12	.45	.90	1.3	1.2	6.3	1.3	.91	.77	.48	.69	.41	e.41
13	.45	.86	1.2	1.2	2.5	1.3	.94	.75	.42	3.8	.38	e.36
14	.44	.84	1.2	1.2	2.1	1.3	.94	.68	.42	.48	.34	.37
15	.44	.84	1.1	1.1	1.9	1.2	1.2	.81	.42	.40	.32	.37
16	.44	.85	1.1	1.1	1.8	1.2	1.1	1.1	.57	.43	.33	.37
17	.46	.84	1.1	1.3	1.8	1.2	.99	.88	.42	.39	19	.37
18	.50	.84	1.1	1.1	1.7	1.1	.93	.71	.39	.34	4.2	.35
19	.49	.84	1.1	1.1	1.7	1.1	.90	.66	.36	.32	1.4	.33
20	.47	.80	1.1	1.0	1.8	1.1	.86	.64	.36	.31	.94	.32
21	.48	.78	1.1	e.93	1.6	1.1	.82	.62	.34	.30	.85	.32
22	11	.78	1.1	e.92	1.5	1.7	.79	.61	.33	.36	.71	.32
23	1.3	.79	.99	e.91	1.5	1.3	.78	.63	.33	.52	.70	.29
24	5.0	.80	.98	e.90	1.5	1.3	.93	.60	.65	2.1	.98	.32
25	1.4	.80	.96	e.90	2.0	1.2	.91	.60	.37	1.8	.92	.29
26	1.1	.78	.94	e.90	3.9	1.1	.80	.55	.33	.75	.77	.27
27	.96	.79	.94	e.89	2.4	1.1	.79	.53	.29	4.2	.78	.26
28	7.0	2.1	.94	e.89	2.1	1.1	.78	.52	.30	1.2	e.74	.25
29	7.5	1.3	.92	e.88	---	1.1	.74	.52	.34	.85	e.70	.26
30	1.9	1.2	.91	e.87	---	1.1	.72	.54	.33	.73	e.88	.26
31	1.4	---	.91	6.1	---	1.1	---	.53	---	.65	e.73	---
TOTAL	48.48	29.10	46.89	52.58	96.7	41.1	28.12	22.25	14.33	24.25	41.80	11.43
MEAN	1.56	.97	1.51	1.70	3.45	1.33	.94	.72	.48	.78	1.35	.38
MAX	11	2.1	6.8	10	22	1.9	1.2	1.3	1.7	4.2	19	.66
MIN	.44	.78	.91	.87	1.5	1.1	.72	.52	.29	.25	.32	.25
CFSM	1.10	.68	1.06	1.20	2.43	.94	.66	.51	.34	.55	.95	.27
IN.	1.27	.76	1.23	1.38	2.53	1.08	.74	.58	.38	.64	1.10	.30

CAL YR 1984 TOTAL 796.45 MEAN 2.18 MAX 24 MIN .32 CFSM 1.54 IN. 20.86
WTR YR 1985 TOTAL 457.03 MEAN 1.25 MAX 22 MIN .25 CFSM .88 IN. 11.97

e Estimated

02152610 SUGAR BRANCH NEAR BOILING SPRINGS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/29	1230	WATER	0	1.32	1	58	6.50	3.0		12.6	280
85/02/15	0950	WATER	0	1.48	2			1.0	10.0	11.6	170
85/03/28	1250	WATER	0	1.36	1	57	6.80	18.0		10.6	100
85/04/17	1130	WATER	0	1.33	.9	65	6.80	16.0		10.4	210
85/05/15	1130	WATER	0	1.22	.6	65	6.80	21.0	3.7	9.0	320
85/06/13	1100	WATER	0	1.13	.4	60	6.70	18.0		9.0	510
85/07/17	1230	WATER	0	1.11	.4	63	6.90	23.0		7.6	340
85/08/13	1145	WATER	0.1	1.10	.4	73	6.90	22.0	6.5	8.2	940
85/09/17	1220	WATER	0.1	1.08	.4	59	6.70	16.0		10.2	550

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/29	1230	WATER	0	8	1K	52					
85/02/15	0950	WATER	0		1	61	1.50	.030	.100K	.020	.010K
85/03/28	1250	WATER	0	10	1	62					
85/04/17	1130	WATER	0	13	4	55					
85/05/15	1130	WATER	0	13	3	68	1.20	.030	.200	.020	.010K
85/06/13	1100	WATER	0	15	3	71					
85/07/17	1230	WATER	0	16	7	82					
85/08/13	1145	WATER	0.1	13	8	100	1.40	.050	.400	.020	.010K
85/09/17	1220	WATER	0.1	12	5	74					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/15	0950	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/15	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/13	1145	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

Lakes and Reservoirs in South Atlantic Slope basin

02067800; 02067820 TALBOTT AND TOWNES RESERVOIRS 1/.--on Dan River. The two reservoirs are operated as a unit for storage of water for Pinnacles hydroelectric plant. Talbott Dam (drainage area, 20.2 mi^2), lat 36°40'36", long 80°23'51", Patrick County, VA, Hydrologic Unit 03010103, 4.5 mi northeast of Kibler. Townes Dam (drainage area, 32.9 mi^2), lat 36°41'11", long 80°25'49", Patrick County, VA, Hydrologic Unit 03010103, 4 mi north of Kibler. PERIOD OF RECORD, February 1939 to December 1945 and January 1948 to September 1960 (combined monthend contents only published in WSP 1723), October 1960 to current year.

Total capacity of Talbott Reservoir, 350,000,000 ft^3 and Townes Reservoir, 60,000,000 ft^3. Storage was started in Talbott Reservoir on Feb. 13, 1939, and in Townes Reservoir several months earlier. Records furnished by city of Danville, VA. (See sta 02068500)

02077280 HYCO LAKE.--Lat 36°30'28", long 79°02'48", Person County, Hydrologic Unit 03010104, at outlet control structure 0.4 mi northwest of dam on Hyco River, 1.1 mi southwest of McGehees Mill and 8 mi northwest of Roxboro. DRAINAGE AREA, 189 mi^2. PERIOD OF RECORD, October 1964 to current year. Prior to October 1970, published as "Roxboro Steam-Electric Generating Plant Lake." GAGE, water-stage recorder and tape gage. Prior to Feb. 11, 1965, staff gage at upstream end of outlet control structure. Datum of gage is 399.79 ft, National Geodetic Vertical Datum of 1929 (levels by Carolina Power and Light Co.).

Lake, used for cooling water at the Roxboro Steam-Electric Generating Plant of Carolina Power and Light Co., first began to fill Sept. 19, 1964, and first reached spillway elevation (9.97 ft gage height) Mar. 19, 1965. Total capacity at top of spillway is 3,288,000,000 ft^3. Lake cannot be drawn below -0.03 ft (bottom of gated flume).

02079964 LAKE GASTON.--Lat 36°30'04", long 77°48'43", Halifax County, Hydrologic Unit 03010106, at Gaston Dam on Roanoke River, 0.2 mi upstream from Black Out Creek, and 2.7 mi northwest of Thelma. DRAINAGE AREA, 8,339 mi^2. PERIOD OF RECORD, October 1962 to current year. GAGE, water-stage recorder and staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake, used mainly for hydroelectric power development, was first filled Oct. 13-15, 1962, and has a total capacity of 22,434,000,000 ft^3. Usable capacity of 20,127,000,000 ft^3 between elevations 165 ft and 203 ft (top of spillway gates) of which 2,788,000,000 ft^3 between elevations 200 ft and 203 ft is reserved for flood control. Storage for power generation is 10,673,000,000 ft^3 between elevations 185 ft and 200 ft. Records furnished by Virginia Electric and Power Co. (See sta 02080500)

02080100 ROANOKE RAPIDS LAKE.--Lat 36°29'10", long 77°39'31", Halifax County, Hydrologic Unit 03010107, at Roanoke Rapids Dam on Roanoke River, 1.5 mi upstream from bridge on State Highway 48, and 2.2 mi north of Roanoke Rapids. DRAINAGE AREA, 8,395 mi^2. PERIOD OF RECORD, June 1955 to September 1960 (monthend contents only published in WSP 1723), October 1960 to current year. GAGE, water-stage recorder and staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake, used for hydroelectric power development, was put in operation June 25, 1955, and has a total capacity of 3,360,220,000 ft^3 at normal highwater elevation of 132.0 ft and 3,515,290,000 ft^3 at elevation 132.75 ft (top of gates). Records furnished by Virginia Electric and Power Co. (See sta 02080500)

02087182 FALLS LAKE.--Lat 35°56'00", long 78°35'00", Wake County, Hydrologic Unit 03020201, at Falls Dam on Neuse River at Falls, 10 mi north of Raleigh, and 235 mi above mouth. DRAINAGE AREA, 770 mi^2. PERIOD OF RECORD, February 1979 to current year. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake, used for flood control, water supply, low-flow augmentation, and recreation. Temporary storage began May 1981 for water supply for city of Raleigh during drought conditions. Jan. 13, 1983, gates closed and normal pool elevation of 250 ft reached Dec. 7, 1983. (See sta 02087183)

02098197 B. EVERETT JORDAN LAKE.--Lat 35°39'17", long 79°04'02", Chatham County, Hydrologic Unit 03030002, at B. Everett Jordan Dam on Haw River, 0.3 mi downstream of mouth of New Hope River, 2.5 mi north of Moncure, 4.2 mi upstream of mouth of Haw River, and 202.2 mi upstream from mouth of Cape Fear River. DRAINAGE AREA, 1,700 mi^2. PERIOD OF RECORD, December 1972 to current year. GAGE, water-stage recorder and staff gage at dam. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake, used for flood control, water supply, low-flow augmentation, and recreation. Some storage was affected during construction and then operated temporarily as a "dry reservoir" January 1975 to August 1981, and reservoir began filling September 1981 and reached normal pool elevation of 216 ft Feb. 4, 1982. Total capacity is 32,825,074,000 ft^3 at elevation 240.0 ft of which 23,454,011,000 ft^3 is controlled flood storage. (See sta 02098198)

02111391 W. KERR SCOTT RESERVOIR.--Lat 36°08'04", long 81°13'30", Wilkes County, Hydrologic Unit 03040101, at W. Kerr Scott Dam on Yadkin River, 0.1 mi upstream from Fish Trap Creek, 2.0 mi upstream from Millers Creek, and 4.0 mi west of Wilkesboro. DRAINAGE AREA, 350 mi^2, approximately. PERIOD OF RECORD, August 1962 to current year. GAGE, water-stage recorder and staff gage at dam. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake, used for flood control, low-flow augmentation, and recreation. Some storage was affected during construction in July 1962, but gates were closed Aug. 22, 1962, and reservoir reached minimum pool elevation on Sept. 11, 1962. Total capacity is 6,664,680,000 ft^3 of which 6,316,200,000 ft^3 is controlled storage. Records furnished by Corps of Engineers. (See sta 02129000)

02122400 HIGH ROCK LAKE.--Lat 35°36'02", long 80°14'06", Davidson County, Hydrologic Unit 03040103, at High Rock Dam on Yadkin River, 0.8 mi northwest of High Rock, 2 mi upstream from Lick Creek, and 256 mi upstream from mouth of Pee Dee River in Winyah Bay. DRAINAGE AREA, 4,000 mi^2, approximately. PERIOD OF RECORD, November 1927 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, water-stage recorder and staff gage at dam. Datum of gage is 30.9 ft National Geodetic Vertical Datum of 1929.

Lake, used for hydroelectric power development, was first put in operation Nov. 7, 1927. Total capacity is 11,090,000,000 ft^3 and usable capacity is 10,230,000,000 ft^3 between elevations 625 ft and 655 ft gage datum (top of gates). Records furnished by Yadkin, Inc. (See sta 02129000)

1/ Included in this report because they materially affect runoff at Dan River near Francisco.

Lakes and Reservoirs in South Atlantic Slope basin--Continued

02122699 **TUCKERTOWN RESERVOIR**.--Lat 35°29'03", long 80°10'30", Stanly County, Hydrologic Unit 03040103, at Tuckertown Dam on Yadkin River, 2.5 mi upstream from Garr Creek, 3.8 mi northeast of New London, and 250 mi upstream from mouth of Pee Dee River in Winyah Bay. DRAINAGE AREA, 4,120 mi^2, approximately. PERIOD OF RECORD, April 1962 to current year. GAGE, remote water-stage recorder in powerhouse. Datum of gage is 30.9 ft National Geodetic Vertical Datum of 1929.

Lake, used for hydroelectric power development, was first filled Apr. 6, 1962. Total capacity is 1,852,400,000 ft^3 and usable capacity is 293,800,000 ft^3 between elevations 593 ft and 596 ft gage datum. Records furnished by Yadkin, Inc. (See sta 02129000)

02122844 **BADIN LAKE**.--Lat 35°35'10", long 80°05'34", Stanly County, Hydrologic Unit 03040103, at Badin Dam on Yadkin River, 1.5 mi northeast of Badin, 2.5 mi upstream from Falls Dam, and 242 mi upstream from mouth of Pee Dee River in Winyah Bay. DRAINAGE AREA, 4,180 mi^2, approximately. PERIOD OF RECORD, December 1917 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, water-stage recorder and staff gage at dam. Datum of gage is 30.9 ft National Geodetic Vertical Datum of 1929.

Lake, (generally known as Narrows Reservoir), used for hydroelectric power development, was first put in operation July 12, 1917. Total capacity is 10,497,960,000 ft^3 and usable capacity is 5,616,584,000 ft^3 between elevations 510.00 ft and 541.10 ft. Records furnished by Yadkin, Inc. (See sta 02129000).

02123736 **LAKE TILLERY**.--Lat 35°12'24", long 80°03'57", Stanly County, Hydrologic Unit 03040104, at Norwood Dam on Pee Dee River, 700 ft upstream from Norfolk Southern Railroad bridge, 3.5 mi southeast of Norwood, 5 mi upstream from Rocky River, and 224 mi upstream from mouth in Winyah Bay. DRAINAGE AREA, 4,600 mi^2, approximately. PERIOD OF RECORD, February 1928 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, water-stage recorder and float-tape gage at dam. Datum of gage is 38.67 ft National Geodetic Vertical Datum of 1929 (levels by Carolina Power and Light Co.).

Lake, used for hydroelectric power development, was first put in operation during January 1928. Total capacity is 7,274,520,000 ft^3 and usable capacity is 5,927,040,000 ft^3 between elevations 200.5 ft and 239.5 ft gage datum (top of gates). Records furnished by Carolina Power and Light Co. (See sta 02129000)

02128800 **BLEWETT FALLS LAKE**.--Lat 34°58'58", long 79°52'40", Richmond County, Hydrologic Unit 03040104, at Blewett Falls Dam on Pee Dee River, 1.2 mi upstream from Cartledge Creek, 6.5 mi northwest of Rockingham, and 195 mi upstream from mouth in Winyah Bay. DRAINAGE AREA, 6,830 mi^2, approximately. PERIOD OF RECORD, December 1929 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, self-synchronous motor, dial indicator and staff gage at dam. Datum of gage is 39.08 ft National Geodetic Verticol Datum of 1929 (levels by Carolina Power and Light Co.).

Lake, used for hydroelectric power development, was first put in use during 1911. Total capacity is 4,225,320,000 ft^3 and usable capacity is 1,850,000,000 ft^3 between elevations 120.0 ft and 139.0 ft gage datum (top of 4-foot flashboards). Records furnished by Carolina Power and Light Co. (See sta 02129000)

02138519 **LAKE JAMES**.--Lat 35°44'36", long 81°50'22", Burke County, Hydrologic Unit 03050101, at Linville Dam at intake tower on Catawba River, 2.1 mi northeast of Bridgewater, and 279 mi upstream from mouth of Wateree River. DRAINAGE AREA, 380 mi^2, approximately. PERIOD OF RECORD, March 1920 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, float gage with self-synchronous motor to indicator in powerhouse. Staff gage at Catawba River Dam is also read when lake elevation drops below 1,160 ft (60 ft gage datum) and lake becomes two separate reservoirs. Datum of gage is 1,100.00 ft National Geodetic Vertical Datum of 1929 (levels by Duke Power Co.).

Lake, (generally known as Bridgewater Reservoir), used for hydroelectric power development, was first put in operation May 5, 1919. The total capacity at elevation 100.0 ft gage datum (crest of spillway) is 12,581,800,000 ft^3 and usable capacity is 7,943,700,000 ft^3 between elevations (gage datum) 65.0 ft and 100.0 ft. Records furnished by Duke Power Co.

02141490 **RHODHISS LAKE**.--Lat 35°46'54", long 81°26'42", Caldwell County, Hydrologic Unit 03030101, at Rhodhiss Dam on Catawba River, 0.8 mi west of Rhodhiss, 1.8 mi south of Granite Falls, and 243 mi upstream from mouth of Wateree River. DRAINAGE AREA, 1,090 mi^2, approximately. PERIOD OF RECORD, September 1935 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, float gage, indicator and reference point at dam. Datum of gage is 895.1 ft National Geodetic Vertical Datum of 1929 (levels by Duke Power Co.).

Lake, used for hydroelectric power development, was first put in operation Feb. 18, 1925. Total capacity is 3,188,592,000 ft^3 and usable capacity is 1,717,000,000 ft^3 between elevations (gage datum) 85.0 ft and 100.0 ft (crest of spillway). Records furnished by Duke Power Co.

02141961 **LAKE HICKORY**.--Lat 35°49'28", long 81°11'28", Alexander County, Hydrologic Unit 03050101, at Oxford Dam on Catawba River, 2 mi upstream from Lower Little River, 7 mi south of Taylorsville, and 226 mi upstream from mouth of Wateree River. DRAINAGE AREA, 1,310 mi^2, approximately. PERIOD OF RECORD, September 1935 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, float gage and indicator at dam. Datum of gage is 835.0 ft National Geodetic Vertical Datum of 1929 (levels by Duke Power Co.).

Lake, (generally known as Oxford Reservoir) used for hydroelectric power development, was first put in operation Apr. 5, 1928. Total capacity is 5,552,985,000 ft^3. Sept. 30, 1935 to Sept. 30, 1957, the usable capacity considered as 2,277,970,200 ft^3 between elevations (gage datum) 85.0 ft and 100.0 ft (top of flood gates). From Apr. 30, 1928 to Aug. 31, 1935, and Oct. 31, 1957 to Sept. 30, 1964, usable capacity considered as 3,378,400,000 ft^3 between elevations 75.0 ft and 100.0 ft (top of flood gates) from Oct. 1, 1964 to present, usable capacity considered as 2,277,800,000 ft^3 between elevations (gage datum) 85.0 ft and 100.0 ft (top of flood gates). Records furnished by Duke Power Co.

02142441 **LOOKOUT SHOALS LAKE**.--Lat 35°45'57", long 81°05'36", Catawba County, Hydrologic Unit 03050101, at Lookout Shoals Dam on Catawba River, 4 mi upstream from bridge on U.S. Highways 64 and 70, 4.2 mi north of Catawba, and 216 mi upstream from mouth of Wateree River. DRAINAGE AREA, 1,450 mi^2, approximately. PERIOD OF RECORD, December 1915 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, float gage, indicator and staff gage at dam. Datum of gage is 738.1 ft National Geodetic Vertical Datum of 1929 (levels by Duke Power Co.).

Lake, used for hydroelectric power development, was first put in operation Dec. 2, 1915. Total capacity was originally 1,355,190,000 ft^3. Capacity has been reduced by silting. Prior to October 1957, the usable capacity considered as 473,980,000 ft^3 and October 1957 to Sept. 30, 1964, as 388,300,000 ft^3 between elevations (gage datum) 90.0 ft and 100.0 ft (crest of spillway). From Oct. 1, 1964 to present, usable capacity considered as 208,200,000 ft^3 between elevations (gage datum) 95.0 ft and 100.0 ft (crest of spillway). Flood of July 16, 1916, washed out an earth dike. Records furnished by Duke Power Co.

Lakes and Reservoirs in South Atlantic Slope basin--Continued

02142647 LAKE NORMAN.--Lat 35°26'05", long 80°57'28", Mecklenburg County, Hydrologic Unit 03050101, at Cowans Ford Dam on Catawba River, 0.8 mi upstream from Derr Creek, 7.8 mi southwest of Davidson, and 182 mi upstream from mouth of Wateree River. DRAINAGE AREA, 1,790 mi^2, approximately. PERIOD OF RECORD, March 1962 to current year. GAGE, float gage with transmitter to dial meter in control room. Datum of gage is 660 ft National Geodetic Vertical Datum of 1929 (levels by Duke Power Co.).

Lake, used for hydroelectric power development began filling in March 1962. Total capacity is 47,586,200,000 ft^3 and usable capacity is 26,910,400,000 ft^3 between elevations (gage datum) 75.0 ft and 100.0 ft (top of flood gates). Records furnished by Duke Power Co.

02142676 MOUNTAIN ISLAND LAKE.--Lat 35°20'03", long 80°59'12", Gaston County, Hydrologic Unit 03050101, at Mountain Island Dam on Catawba River, 1.5 mi downstream from bridge on State Highway 16, 3 mi northeast of Mount Holly, and 167 mi upstream from mouth of Wateree River. DRAINAGE AREA, 1,860 mi^2, approximately. PERIOD OF RECORD, December 1923 to September 1960 (monthend contents only, published in WSP 1723), October 1960 to current year. GAGE, float gage, indicator and stage gage at dam. Datum of gage is 547.5 ft National Geodetic Vertical Datum of 1929 (levels by Duke Power Co.).

Lake, used for hydroelectric power development, was first put in operation Dec. 16, 1923. Total capacity is 2,495,988,000 ft^3. Prior to October 1964 usable capacity is considered 1,132,000,000 ft^3 between elevations (gage datum) 90.0 ft and 100.0 ft (crest of spillway) October 1964 to present considered as 845,000,000 ft^3 between elevations (gage datum) 93.0 ft and 100.0 ft (crest of spillway). Records furnished by Duke Power Co.

OTHER RESERVOIRS.--The following smaller reservoirs in the South Atlantic Slope basin are described below, but records of contents are not published herein:

02077229 LAKE ROXBORO.--Lat 79°08'26", long 36°20'55", Caswell County, Hydrologic Unit 03010104, part of Roxboro's municipal water supply on South Hyco Creek near Roseville. DRAINAGE AREA, 23.2 mi^2. Total capacity 380,991,000 ft^3. Dam completed and filled April 1978. (See sta 02077250)

02077302 ROXBORO STEAM-ELECTRIC GENERATING PLANT AFTERBAY RESERVOIR.--Lat 36°31'51", long 78°59'50", Person County, Hydrologic Unit 03010104, cooling water reservoir for Carolina Power and Light Company plant, on Hyco River near McGehees Mill. DRAINAGE AREA, 196 mi^2. Total capacity is approximately 522,720,000 ft^3 with a surface area of about 650 acres at a normal elevation of 385 ft, National Geodetic Vertical Datum of 1929. Dam completed May 30, 1974, and storage began Apr. 26, 1974; water in reservoir first reached normal water level elevation of 385 ft on Aug. 22, 1974.

02077665 MAYO STEAM-ELECTRIC GENERATING PLANT LAKE.--Lat 36°32'15", long 78°52'30", Person County, Hydrologic Unit 03010104, cooling water reservoir for Carolina Power and Light Company plant, on Mayo Creek near Bethel Hill. DRAINAGE AREA, 52.2 mi^2. Total capacity is 3,831,000,000 ft^3 with a surface area of 2,800 acres at a normal elevation of 434 ft National Geodetic Vertical Datum of 1929. Dam completed and storage began Aug. 1, 1980; water in reservoir first reached normal water level elevation of 434 ft on April 16, 1983. (See sta 02077660)

02086490 LAKE MICHIE.--Lat 36°09'02", long 79°49'49", Durham County, Hydrologic Unit 03020201, at Durham municipal dam on Flat River, 3 mi southeast of Bahama, and 5 mi upstream from confluence with Eno River. DRAINAGE area, 170 mi^2, approximately. PERIOD OF RECORD, October 1962 to April 1975.

Lake, used for municipal water supply, began filling in May 1926 and reached spillway elevation Dec. 26, 1926. Total capacity is 618,000,000 ft^3 between elevations (gage datum) 300.0 ft and 341.0 ft (crest of spillway). (See sta 02087000)

02087339 LAKE JOHNSON.--Lat 35°45'44", long 78°42'17", Wake County, Hydrologic Unit 03020201, part of Raleigh's municipal water supply, on Walnut Creek near Raleigh. DRAINAGE AREA, 7.05 mi^2. Total capacity is 98,900,000 ft^3. Dam was completed in 1923 and spillway raised to its present elevation in 1951 (See sta 02087500)

02087344 LAKE RALEIGH.--Lat 35°45'56", long 78°40'38", Wake County, Hydrologic Unit 03020201, part of Raleigh's municipal water supply, on Walnut Creek near Raleigh. DRAINAGE AREA, 12.3 mi^2. Total capacity is 13,400,000 ft^3. Dam completed in 1914 and raised to its present elevation in 1919. (See sta 02087500)

02087580 LAKE WHEELER.--Lat 35°41'30", long 78°41'31", Wake County, Hydrologic Unit 03020201, part of Raleigh's municipal water supply on Swift Creek near Raleigh. DRAINAGE AREA, 38 mi^2, approximately. Total capacity is 267,400,000 ft^3. Dam completed and storage began in 1956. (See sta 02087500)

02087701 LAKE BENSON.--Lat 35°39'44", long 78°36'42", Wake County, Hydrologic Unit 03020201, part of Raleigh's municipal water supply on Swift Creek near Garner. DRAINAGE AREA, 67 mi^2, approximately. Total capacity is 133,700,000 ft^3. Lake, formerly known as Rand's Mill, acquired by city of Raleigh in 1927 and spillway raised to its present elevation in 1954. (See sta 02087500)

02090370 BUCKHORN RESERVOIR.--Lat 35°41'22", long 78°07'33", Wilson County, Hydrologic Unit 03020203, part of Wilson's municipal water supply on Contentnea Creek near Lucama. DRAINAGE AREA, 155 mi^2. Total capacity 133,680,000 ft^3. Dam completed Nov. 12, 1976 and reservoir filled Dec. 1, 1976. (See sta 02090380)

02093981 LAKE HIGGINS.--Lat 36°10'11", long 79°52'49", Guilford County, Hydrologic Unit 03030002, part of Greensboro's municipal water supply, on Brush Creek near Greensboro. DRAINAGE AREA, 12 mi^2, approximately. Total capacity is 107,000,000 ft^3. Reservoir first filled Mar. 1, 1957. (See sta 02094500)

02094117 LAKE BRANDT.--Lat 36°10'20", long 79°50'20", Guilford County, Hydrologic Unit 03030002, part of Greensboro's municipal water supply, on Reedy Fork and Horsepen Creek near Greensboro. DRAINAGE AREA, 70.0 mi^2, approximately. Total capacity is 294,000,000 ft^3. Dam completed February 1923 and raised to present level 1959-60. Reservoir first filled at present level on Oct. 8, 1960. (See sta 02094500)

02094305 LAKE TOWNSEND.--Lat 36°11'25", long 79°43'57", Guilford County, Hydrologic Unit 03030002, part of Greensboro's municipal water supply, on Reedy Fork near Greensboro. DRAINAGE AREA, 105 mi^2. Total capacity is 869,000,000 ft^3. Dam completed Oct. 18, 1968, and reservoir first filled Aug. 17, 1969. (See sta 02094500)

Lakes and Reservoirs in South Atlantic Slope basin--Continued

02096003 **LAKE BURLINGTON.**--Lat 36°10'25", long 79°24'53", Alamance County, Hydrologic Unit 03030002, part of Burlington's municipal water supply, on Stony Creek near Burlington. DRAINAGE AREA, 44 mi^2, approximately. Prior to October 1971 published as "Stony Creek Reservoir." Total capacity is 427,800,000 ft^3. Dam completed August 1960 and reservoir first filled Jan. 28, 1961. (See sta 02096500)

02096432 **STONY CREEK RESERVOIR.**--Lat 36°07'37", long 79°24'20", Alamance County, Hydrologic Unit 03030002, part of Burlington's water supply on Stony Creek near Burlington. DRAINAGE AREA, 95.0 mi^2, approximately. Prior to October 1971 published as "Lake Burlington." Total capacity is 64,900,000 ft^3. Dam completed and reservoir filled in 1928. (See sta 02096500)

02098495 **OAK HOLLOW RESERVOIR.**--Lat 36°00'42", long 79°59'11", Guilford County, Hydrologic Unit 03030003, part of High Point's municipal water supply, on West Fork Deep River, 1.8 mi southwest of Deep River. DRAINAGE AREA, 32 mi^2, approximately. Total capacity is 460,000,000 ft^3. Dead storage (non-withdrawal) is minor. Total surface area, about 725 acres. Dam completed and storage began in May 1970. Reservoir first filled Dec. 24, 1970. (See sta 02099500)

02099096 **HIGH POINT MUNICIPAL LAKE.**--Lat 35°59'43", long 79°56'42", Guilford County, Hydrologic Unit 03030003, High Point's municipal water supply, on Deep River near High Point. DRAINAGE AREA, 61.4 mi^2. Total capacity is 220,500,000 ft^3. Dam completed in 1926 and reservoir first filled in 1927. (See sta 02099500)

02102178 **BUCKHORN RESERVOIR.**--Lat 35°31'35", long 78°59'22", Chatham County, Hydrologic Unit 03030004, on Cape Fear River near Corinth. DRAINAGE AREA, 3,200 mi^2, approximately. Usable capacity is 69,700,000 ft^3. Completed and filled in 1908. Hydroelectric power operation stopped Dec. 31, 1962.

02102190 **SHEARON HARRIS MAIN RESERVOIR.**--Lat 35°34'00", long 78°57'55", Chatham County, Hydrologic Unit 03030004, cooling water reservoir for Carolina Power and Light Co. plant, on Buckhorn Creek near Corinth. DRAINAGE AREA, 71 mi^2. Total capacity is 3,136,320,000 ft^3 with a surface area of 4,150 acres at a normal elevation of 220 ft, National Geodetic Vertical Datum of 1929. Dam completed Dec. 23, 1981, and storage began Dec. 1, 1980. (See sta 02102192)

02121461 **LEXINGTON-THOMASVILLE RESERVOIR.**--Lat 35°51'54", long 80°11'41", Davidson County, Hydrologic Unit 03050103, Lexington and Thomasville's municipal water supply on Abbotts Creek near Lexington. DRAINAGE AREA, 70.3 mi^2. Total capacity is 284,100,000 ft^3 of which 281,400,000 ft^3 is usable. Dam completed Aug. 8, 1957, and reservoir first filled Nov. 23, 1957.

02184122 **LAKE TOXAWAY.**--Lat 35°07'27", long 82°55'56", Transylvania County, Hydrologic Unit 03060101, recreation lake on Toxaway River at town of Lake Toxaway. DRAINAGE AREA, 7.79 mi^2. Total surface area, about 640 acres. Lake reached spillway elevation September 1961.

Lakes and Reservoirs in South Atlantic Slope basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Combined contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02067800 & 02067820 Talbott & Townes Reservoirs			02077280 Hyco Lake			02079964 Lake Gaston			02080100 Roanoke Rapids Lake		
Sept. 30........		297	-	10.05	3,300	-	199.40	19,079	-	128.2	2,663	-
Oct. 31........		269	-28	10.24	3,330	+30	199.44	19,114	+35	128.1	2,646	-17
Nov. 30........		268	-1	10.38	3,352	+22	199.91	19,523	+409	128.7	2,744	+98
Dec. 31........		265	-3	10.46	3,364	+12	199.32	19,009	-514	130.4	3,044	+300
CAL YR 1984		-	-71		-	-		-	-254		-	+218
Jan. 31........		262	-3	10.61	3,388	+24	199.58	19,236	+227	128.8	2,760	-284
Feb. 28........		323	+61	10.73	3,406	+18	199.70	19,341	+105	128.8	2,760	0
Mar. 31........		320	-3	10.54	3,376	-30	199.42	19,096	-245	127.9	2,613	-147
Apr. 30........		330	+10	10.31	3,342	-34	199.07	18,792	-304	129.0	2,790	+177
May 31........		330	0	10.30	3,340	-2	199.56	19,219	+427	128.1	2,646	-144
June 30........		317	-13	10.03	3,298	-42	199.19	18,896	-323	127.7	2,580	-66
July 31........		307	-10	10.22	3,327	+29	199.67	19,315	+419	129.0	2,790	+210
Aug. 31........		355	+48	11.04	3,455	+128	199.60	19,254	-61	131.0	3,162	+372
Sept. 30........		304	-51	10.12	3,311	-144	199.45	19,122	-132	128.7	2,744	-418
WTR YR 1985		-	+7		-	+11		-	+43		-	+81

Date	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02098197 B. Everett Jordan Lake			02111391 W. Kerr Scott Reservoir			02122400 High Rock Lake			02122699 Tuckertown Reservoir		
Sept. 30........	215.1	8,440	-	1,028.05	1,688.95	-	647.9	7,012	-	595.46	1,796	-
Oct. 31........	214.0	8,216	-224	1,028.00	1,688.95	0	645.0	5,670	-1,342	595.21	1,771	-25
Nov. 30........	212.8	7,568	-648	1,028.40	1,712.11	+23.2	640.9	4,122	-1,548	595.18	1,767	-4
Dec. 31........	214.9	8,724	+1,156	1,027.15	1,641.88	-70.2	636.8	2,865	-1,257	595.27	1,777	+10
CAL YR 1984		-	-1,404		-	-148		-	-5,068		-	-15
Jan. 31........	216.4	9,622	+898	1,027.15	1,641.88	0	638.2	3,271	+406	595.04	1,753	-24
Feb. 28........	216.9	9,936	+314	1,029.95	1,790.23	+148.3	645.4	5,846	+2,575	595.12	1,761	+8
Mar. 31........	216.0	9,371	-565	1,027.85	1,677.22	-113.0	646.8	6,482	+636	593.39	1,594	-167
Apr. 30........	215.9	9,312	-59	1,029.85	1,781.56	+104.3	648.5	7,312	+830	594.69	1,718	+124
May 31........	215.8	9,253	-59	1,028.85	1,735.27	-46.3	651.0	8,644	+1,332	595.20	1,769	+51
June 30........	214.8	8,668	-585	1,025.45	1,536.01	-199.3	652.2	9,336	+692	594.35	1,685	-84
July 31........	216.6	9,748	+1,080	1,027.00	1,630.10	-94.1	651.7	9,038	-298	594.93	1,741	+56
Aug. 31........	216.6	9,748	0	1,030.20	1,807.17	+177.1	653.0	9,819	+781	595.03	1,752	+11
Sept. 30........	214.8	8,668	-1,080	1,024.30	1,471.32	-335.8	649.3	7,722	-2,097	595.08	1,757	+5
WTR YR 1985		-	+228		-	-217.6		-	+710		-	-39

Lakes and Reservoirs in South Atlantic Slope basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02122844 Badin Lake			02123736 Lake Tillery			02128800 Blewett Falls Lake		
Sept. 30........	539.2	10,054	-	239.0	5,815	-	137.6	1,703	-
Oct. 31........	538.8	9,961	-93	239.2	5,859	+44	137.6	1,703	0
Nov. 30........	538.0	9,777	-184	239.0	5,815	-44	137.1	1,650	-53
Dec. 31........	538.7	9,937	+160	239.0	5,815	0	137.9	1,734	+84
CAL YR 1984		-	-467		-	+21		-	-154
Jan. 31........	536.8	9,507	-430	239.2	5,859	+44	135.2	1,460	-274
Feb. 28........	539.6	10,147	+640	238.1	5,622	-237	139.9	1,940	+480
Mar. 31........	538.1	9,799	-348	238.8	5,772	+150	138.5	1,798	-142
Apr. 30........	538.8	9,961	+162	238.5	5,708	-64	137.5	1,692	-106
May 31........	539.6	10,147	+186	239.2	5,859	+151	137.7	1,714	+22
June 30........	539.1	10,031	-116	238.8	5,772	-87	138.1	1,756	+42
July 31........	539.6	10,147	+116	239.0	5,815	+43	137.5	1,692	-64
Aug. 31........	540.3	10,311	+164	237.8	5,557	-258	137.0	1,640	-52
Sept. 30........	538.0	9,777	-534	236.5	5,280	-277	132.6	1,200	-440
WTR YR 1985		-	-277		-	-535		-	-503

Date	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02138519 Lake James			02141490 Rhodhiss Lake			02141961 Lake Hickory		
Sept. 30........	96.0	11,487	-	95.6	1,098	-	96.7	1,708	-
Oct. 31........	95.0	11,225	-262	97.0	1,284	+186	96.8	1,724	+16
Nov. 30........	95.7	11,408	+183	95.4	1,073	-211	97.3	1,808	+84
Dec. 31........	95.5	11,355	-53	96.8	1,257	+184	96.8	1,724	-84
CAL YR 1984		-	-835		-	-384		-	-412
Jan. 31........	94.2	11,018	-337	93.9	887	-370	97.0	1,758	+34
Feb. 28........	95.6	11,386	+386	96.8	1,257	+370	97.1	1,775	+17
Mar. 31........	93.7	10,890	-496	96.8	1,257	0	97.0	1,758	-17
Apr. 30........	95.1	11,251	+361	96.8	1,257	0	97.0	1,758	0
May 31........	96.8	11,700	+449	97.0	1,284	+27	97.2	1,791	+33
June 30........	96.8	11,700	0	96.6	1,230	-54	96.9	1,741	-50
July 31........	98.0	12,025	+325	95.8	1,124	-106	97.1	1,775	+34
Aug. 31........	99.0	12,301	+276	99.0	1,567	+443	98.6	2,031	+256
Sept. 30........	96.0	11,487	-814	96.5	1,216	-351	96.0	1,592	-439
WTR YR 1985		-	0		-	+118		-	-116

Date	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	02142441 Lookout Shoals Lake			02142647 Lake Norman			02142676 Mountain Island Lake		
Sept. 30........	97.0	80	-	96.7	43,080	-	96.4	378	-
Oct. 31........	98.5	143	+63	96.1	42,290	-790	96.2	354	-24
Nov. 30........	97.2	88	-55	95.5	41,520	-770	96.5	390	+36
Dec. 31........	97.9	117	+29	94.3	40,000	-1,520	97.3	480	+90
CAL YR 1984		-	-4		-	-3,880		-	-87
Jan. 31........	96.9	76	-41	92.3	37,570	-2,430	96.5	390	-90
Feb. 28........	97.9	117	+41	92.4	37,690	+120	96.0	330	-60
Mar. 31........	97.8	113	-4	93.7	39,260	+1,570	96.0	330	0
Apr. 30........	98.2	130	+17	95.1	41,010	+1,750	96.6	402	+72
May 31........	97.9	117	-13	95.9	42,030	+1,020	95.8	307	-95
June 30........	98.3	138	+21	96.3	42,550	+520	95.9	318	+11
July 31........	97.9	117	-21	98.0	44,820	+2,270	96.2	354	+36
Aug. 31........	97.7	109	-8	98.6	45,640	+820	97.1	462	+108
Sept. 30........	97.7	109	0	97.6	44,280	-1,360	96.4	378	-84
WTR YR 1985		-	+29		-	+1,200		-	0

KANAWHA RIVER BASIN

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC

LOCATION.--Lat 36°23'35", long 81°24'26", Ashe County, Hydrologic Unit 05050001, on right bank 600 ft upstream from bridge on State Highways 16 and 88, 0.2 mi downstream from Bear Creek, and 4 mi southeast of Jefferson.

DRAINAGE AREA.--205 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1925-26(M), 1928-30(M), 1931-32, 1933-35(M), 1941-42(m), 1944(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,657.04 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 14, 1934, nonrecording gage on bridge 400 ft downstream at same datum. Oct. 14, 1934 to Mar. 25, 1935, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U. S. Army Corps of Engineers satellite telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--61 years, 430 ft³/s, 28.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,800 ft³/s Aug. 14, 1940, gage height, 22.50 ft from rating curve extended above 5,100 ft³/s on basis of slope-area measurement of peak flow; minimum, 52 ft³/s Dec. 24, 1943, result of freezeup; minimum daily, 65 ft³/s Sept. 9, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 15, 1916, reached a stage of 18.0 ft, from floodmarks witnessed by local resident, discharge, 35,200 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 2,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 10	0230	*3,190	*5.83	No other peak greater than base discharge.			

Minimum discharge, 109 ft³/s Jan. 21, result of freezeup; minimum daily, 132 ft³/s July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	205	374	220	e750	442	368	286	226	210	252	283
2	272	198	324	231	e900	412	322	289	219	225	272	254
3	210	191	311	357	e780	380	291	319	261	211	253	241
4	196	204	293	614	e540	357	281	307	234	190	210	232
5	190	285	284	563	e470	346	277	277	215	185	187	228
6	187	251	354	403	e435	331	454	267	229	185	179	281
7	189	213	318	346	e430	316	421	260	253	179	186	252
8	201	200	297	316	e300	308	339	258	338	176	204	299
9	204	194	312	297	e250	316	329	254	258	160	288	257
10	198	196	290	275	e340	316	326	262	221	153	241	232
11	192	522	281	275	e340	299	312	264	344	161	196	211
12	187	404	282	e230	e480	301	302	262	312	180	182	203
13	183	264	267	e220	e380	290	294	307	262	155	177	201
14	180	231	257	e230	e260	281	291	354	234	228	186	193
15	178	219	250	e220	e270	275	430	307	220	197	161	184
16	179	214	248	e220	e320	266	749	382	217	180	160	182
17	180	205	247	e240	e280	264	595	357	221	170	786	179
18	180	198	245	e250	e290	259	471	314	212	153	2440	179
19	179	212	242	e250	e355	252	416	287	207	146	846	174
20	186	234	241	e200	e340	251	383	254	201	141	538	171
21	225	210	244	e150	e450	250	361	245	195	136	497	169
22	273	196	247	e200	e500	328	340	236	191	133	365	167
23	249	189	248	e230	571	611	325	244	190	132	310	169
24	234	192	233	e240	618	446	350	325	187	155	286	174
25	223	190	232	e250	571	392	439	350	183	200	296	181
26	222	188	233	e250	658	342	345	280	179	327	353	171
27	212	187	226	e250	588	320	317	251	169	429	649	167
28	199	984	224	e250	497	309	325	237	166	341	527	176
29	205	1150	223	e260	---	303	340	232	168	293	370	163
30	285	486	221	e320	---	295	305	230	218	269	318	157
31	220	---	222	e430	---	293	---	244	---	297	302	---
TOTAL	6611	8812	8270	8787	12963	10151	11098	8741	6730	6297	12217	6130
MEAN	213	294	267	283	463	327	370	282	224	203	394	204
MAX	313	1150	374	614	900	611	749	382	344	429	2440	299
MIN	178	187	221	150	250	250	277	230	166	132	160	157
CFSM	1.04	1.43	1.30	1.38	2.26	1.60	1.80	1.38	1.09	.99	1.92	.00
IN.	1.20	1.60	1.50	1.59	2.35	1.84	2.01	1.59	1.22	1.14	2.22	1.11

CAL YR 1984	TOTAL 151998	MEAN	415	MAX	3610	MIN	175	CFSM 2.02	IN.	27.58
WTR YR 1985	TOTAL 106807	MEAN	293	MAX	2440	MIN	132	CFSM 1.43	IN.	19.38

e Estimated

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/10	1000	WATER	0	1.98	200	44	7.00	11.0	1.5	8.9	90
84/11/14	1010	WATER	0	2.09	232	33	7.20	4.0		12.0	100
84/12/11	0950	WATER	0	2.23	289	55	7.10	5.0		12.0	1100
85/01/09	0920	WATER	0	2.30	322	42	7.00	.0	1.7	12.9	80
85/02/07	1335	WATER	0	2.86	570	47	7.20	2.0		11.8	90
85/03/07	0950	WATER	0	2.24	318	35	7.00	6.0		11.9	10
85/04/15	0940	WATER	0	2.50	434	31	7.00	13.0	1.3	10.4	2100
85/05/09	1000	WATER	0	2.04	254	36	7.10	15.0		9.6	50
85/06/13	0950	WATER	0	2.19	264	48	7.00	15.0		8.2	100
85/07/16	1400	WATER	0	1.88	171	45	8.70	25.0	3.3	8.7	60
85/08/14	0945	WATER	0.1	2.02	210	53	6.90	22.0		7.4	170
85/09/16	0935	WATER	0.1	1.91	179	50	7.10	14.0		9.1	80

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/10	1000	WATER	0	14	2	38	.32	.030	.200	.030	.010K
84/11/14	1010	WATER	0	12	3	33					
84/12/11	0950	WATER	0	12	6	63					
85/01/09	0920	WATER	0	13	8	79	.61	.040	.200	.020	.010K
85/02/07	1335	WATER	0	15	34	72					
85/03/07	0950	WATER	0	13	1	91					
85/04/15	0940	WATER	0	9	29	59	.43	.030	.400	.060	.010K
85/05/09	1000	WATER	0	13	6	38					
85/06/13	0950	WATER	0	14	33	120					
85/07/16	1400	WATER	0	16	4	49	.30	.090	.200	.040	.020
85/08/14	0945	WATER	0.1	17	8	43					
85/09/16	0935	WATER	0.1	15	3	49					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/10	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/01/09	0920	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/04/15	0940	WATER	0	10K	20K	50K	20K	100K	.2K	100K	40
85/07/16	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03439000 FRENCH BROAD RIVER AT ROSMAN, NC

LOCATION.--Lat 35°08'32", long 82°49'28", Transylvania County, Hydrologic Unit 06010105, on left bank 50 ft upstream from bridge on U.S. Highway 178 at Rosman, 1.0 mi upstream from East Fork, and at mile 216.4.

DRAINAGE AREA.--67.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1907 to June 1909, October 1935 to current year. Monthly discharge only for some periods published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1306: 1908(M). WSP 1910: 1936(M), 1938(M), 1939-40, 1942-43.

GAGE.--Water-stage recorder. Datum of gage is 2,173.83 ft above National Geodetic Vertical Datum of 1929. Prior to June 30, 1909, nonrecording gage at site 500 ft downstream at different datum. Jan. 1, 1936 to July 6, 1937, nonrecording gage at present site and datum.

REMARKS.--Records good. The National Weather Service has a stage telephone telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--51 years (1907-8, 1936-85), 240 ft^3/s, 48.00 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s Oct. 4, 1964, gage height, 14.95 ft; minimum, 23 ft^3/s Jan. 3, 1940, gage height, 1.51 ft, result of freezeup; minimum daily, 37 ft^3/s Sept. 25-28, Oct. 5, 6, 25, 26, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 13.9 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 17	1415	*2,830	*8.03	No other peak greater than base discharge.			

Minimum discharge, 69 ft^3/s June 22, 23, 27, 28, July 10, 11, 21, gage height, 1.71 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	107	147	102	500	189	131	118	100	119	197	160
2	110	104	153	221	477	182	120	142	94	97	161	150
3	108	108	181	260	309	173	118	148	93	78	139	142
4	104	216	149	273	243	168	116	123	89	93	123	138
5	102	167	257	214	254	166	136	118	87	95	114	135
6	102	132	284	181	273	159	291	113	85	105	107	143
7	102	120	213	165	229	154	170	112	106	100	168	139
8	111	114	189	153	204	153	153	143	126	79	151	145
9	110	110	172	144	190	151	145	164	92	78	144	157
10	113	129	161	139	183	146	138	175	86	77	122	147
11	104	226	152	136	304	143	135	170	89	81	130	137
12	100	144	144	128	612	142	130	250	109	84	130	132
13	97	128	137	124	346	137	131	314	88	97	121	135
14	95	120	132	122	290	136	135	225	81	88	105	123
15	95	115	129	117	258	132	331	189	79	101	98	117
16	95	112	125	116	234	130	273	170	80	129	94	113
17	99	107	122	132	221	129	226	160	76	96	1360	111
18	98	106	120	122	211	126	197	151	86	79	572	108
19	92	123	117	117	206	124	181	139	78	75	336	105
20	92	111	117	111	204	123	170	132	75	72	265	102
21	132	105	115	e110	193	126	161	127	72	71	225	101
22	166	103	123	e110	190	195	152	124	70	112	197	100
23	144	101	114	e110	188	165	147	125	81	160	181	98
24	142	100	112	e120	186	149	156	118	81	106	189	108
25	140	100	112	e125	212	143	149	117	78	161	328	99
26	114	98	109	e120	261	134	137	112	77	279	239	101
27	104	95	109	e110	213	131	136	109	74	183	211	109
28	146	384	106	129	196	129	132	108	69	296	192	95
29	173	205	104	107	---	128	127	110	82	284	206	94
30	127	164	104	103	---	124	123	108	103	229	200	92
31	112	---	102	184	---	130	---	104	---	268	172	---
TOTAL	3548	4054	4411	4405	7387	4517	4847	4518	2586	3972	6977	3636
MEAN	114	135	142	142	264	146	162	146	86.2	128	225	121
MAX	173	384	284	273	612	195	331	314	126	296	1360	160
MIN	92	95	102	102	183	123	116	104	69	71	94	92
CFSM	1.68	1.99	2.09	2.09	3.89	2.15	2.39	2.15	1.27	1.89	3.31	1.78
IN.	1.94	2.22	2.42	2.41	4.05	2.47	2.66	2.48	1.42	2.18	3.82	1.99

CAL YR 1984	TOTAL	93043	MEAN	254	MAX	1140	MIN	92	CFSM	3.74	IN.	50.97
WTR YR 1985	TOTAL	54858	MEAN	150	MAX	1360	MIN	69	CFSM	2.21	IN.	30.05

e Estimated

03439000 FRENCH BROAD RIVER AT ROSMAN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	1030	WATER	0	2.12	164	24	6.30	16.0		9.1	310
84/11/06	1100	WATER	0	2.00	133	26	6.50	10.0	1.7	10.8	490
84/12/10	1145	WATER	0	2.11	162	14	6.40	6.0		10.2	50
85/01/15	1110	WATER	0	1.93	116	18	6.50	1.0		12.6	20
85/02/21	1000	WATER	0	2.22	192	21		5.0	1.0K	12.5	20
85/03/18	1110	WATER	0	1.97	125	20	6.50	8.0		11.0	20
85/04/22	0945	WATER	0	2.08	154	22	6.80	13.0		10.1	60
85/05/22	1050	WATER	0	1.97	125	18	6.80	16.5	4.5	9.4	40
85/06/18	1110	WATER	0	1.86	100	22	6.50	19.0		9.0	100
85/07/10	1130	WATER	0	1.76	78	21	6.80	20.0		8.9	100
85/08/06	1145	WATER	0	1.90	109	21	7.00	18.0	2.3	9.5	70
85/09/11	1130	WATER	0.1	1.98	1	22	6.70	19.0		9.1	140

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	1030	WATER	0	5	7	46					
84/11/06	1100	WATER	0	6	3	21	.19	.100	.200	.040	.020
84/12/10	1145	WATER	0	5	2	28					
85/01/15	1110	WATER	0	6	1K	28					
85/02/21	1000	WATER	0		3	36	.14	.050	.100	.020	.010K
85/03/18	1110	WATER	0	6	2	31					
85/04/22	0945	WATER	0	7	4	29					
85/05/22	1050	WATER	0	6	8	49	.30	.040	.200	.060	.020
85/06/18	1110	WATER	0	7	13	66					
85/07/10	1130	WATER	0	5	11	20					
85/08/06	1145	WATER	0	6	9	53	.34	.020	.200	.060	.020
85/09/11	1130	WATER	0.1	5	6	49					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/06	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/22	1050	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/06	1145	WATER	0	10K	20K	50K	20K	100K	.0	100K	20K

K Less than noted value.

03441000 DAVIDSON RIVER NEAR BREVARD, NC

LOCATION.--Lat 35°16'23", long 82°42'21", Transylvania County, Hydrologic Unit 06010105, on right bank 150 ft upstream from bridge on State Highway 280, 2.1 mi downstream from Avery Creek, 3.3 mi northeast of Brevard, and at mile 2.2.

DRAINAGE AREA.--40.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1336: 1921, 1922(M), 1923, 1924-25(M), 1926, 1927(M), 1929-32(M).

GAGE.--Water-stage recorder. Datum of gage is 2,115.13 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Prior to May 17, 1934, nonrecording gage at site 50 ft downstream at same datum.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--65 years, 130 ft³/s, 43.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s Aug. 15, 1928, gage height, 11.8 ft; minimum, 13 ft³/s Oct. 11, 1954, gage height, 0.31 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, 11.9 ft June 1876 (from studies by Tennessee Valley Authority).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	1400	*2,260	*5.35	No other peak greater than base discharge.			

Minimum discharge, 29 ft³/s July 10, 11, 19, 20, 21; minimum gage height, 0.48 ft July 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	46	66	51	286	98	76	64	49	77	139	92
2	43	44	67	108	280	95	69	71	47	54	104	79
3	41	47	82	166	176	91	68	72	46	41	84	75
4	41	107	64	185	135	88	66	63	44	37	73	72
5	40	76	124	133	147	90	75	61	42	36	64	69
6	39	58	155	107	167	84	166	59	42	40	60	93
7	39	52	104	96	137	82	97	57	46	41	81	83
8	45	49	90	88	119	81	88	82	57	34	73	73
9	47	47	80	81	112	82	83	87	42	32	71	76
10	46	60	73	78	103	78	79	96	39	30	63	77
11	43	128	68	77	151	77	77	85	39	34	71	71
12	41	69	64	71	326	77	75	194	45	39	70	69
13	40	60	61	e70	188	74	75	209	38	100	68	70
14	40	55	59	e68	155	73	77	125	37	50	55	64
15	40	52	57	66	137	71	222	105	36	41	50	60
16	40	50	55	e70	126	69	170	91	37	45	51	58
17	42	47	54	e75	118	71	135	84	35	34	999	54
18	41	46	54	70	111	69	116	77	44	31	444	52
19	40	63	54	67	108	68	105	70	37	30	245	50
20	39	52	54	63	104	68	98	67	38	30	179	49
21	57	48	53	e49	100	69	91	65	34	37	146	48
22	83	46	59	e70	98	109	86	64	33	53	124	48
23	61	46	53	e82	98	92	82	62	35	67	114	47
24	56	44	53	e88	98	84	83	60	43	60	111	60
25	52	44	54	e98	110	79	80	58	50	112	155	48
26	45	43	52	e84	137	76	75	54	45	181	128	52
27	42	43	52	e88	110	74	75	53	34	97	115	54
28	68	193	50	e93	102	73	74	54	39	175	107	46
29	69	95	52	e86	---	72	70	54	42	154	105	43
30	53	74	51	e81	---	70	67	51	66	166	94	42
31	48	---	50	121	---	75	---	51	---	212	89	---
TOTAL	1469	1884	2064	2730	4039	2459	2800	2445	1261	2170	4332	1874
MEAN	47.4	62.8	66.6	88.1	144	79.3	93.3	78.9	42.0	70.0	140	62.5
MAX	83	193	155	185	326	109	222	209	66	212	999	93
MIN	39	43	50	49	98	68	66	51	33	30	50	42
CFSM	1.17	1.55	1.65	2.18	3.56	1.96	2.31	1.95	1.04	1.73	3.47	1.55
IN.	1.35	1.73	1.90	2.51	3.72	2.26	2.58	2.25	1.16	2.00	3.99	1.73

CAL YR 1984 TOTAL 48949 MEAN 134 MAX 574 MIN 39 CFSM 3.32 IN. 45.07
WTR YR 1985 TOTAL 29527 MEAN 80.9 MAX 999 MIN 30 CFSM 2.00 IN. 27.19

e Estimated

03441000 DAVIDSON RIVER NEAR BREVARD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	1000	WATER	0	.67	52	18	6.30	16.0		9.0	10
84/11/06	1000	WATER	0	.70	59	20	6.40	9.0	1.0K	10.8	20
84/12/10	1100	WATER	0	.80	73	14	6.40	4.0		10.4	10
85/01/15	1045	WATER	0	.73	71	15	6.50	.0		13.0	10K
85/02/21	0930	WATER	0	.88	100	14		3.0	1.0K	13.0	10K
85/03/18	1045	WATER	0	.72	70	14	6.40	5.0		11.8	10K
85/04/22	0845	WATER	0	.85	88	19	6.20	13.0		10.2	10
85/05/22	1200	WATER	0	.74	64	14	6.70	15.0	1.0K	9.6	40
85/06/18	1015	WATER	0	.64	50	29	6.40	18.0		8.9	220
85/07/10	1040	WATER	0	.50	32	22	6.80	19.0		8.9	30
85/08/06	1100	WATER	0	.70	61	21	6.80	17.0	1.0K	9.3	10K
85/09/11	1030	WATER	0.1	.75	71	16	6.70	18.5		8.9	50

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	1000	WATER	0	4	3	33					
84/11/06	1000	WATER	0	3	1	10	.05	.050	.200	.030	.020
84/12/10	1100	WATER	0	4	2	15					
85/01/15	1045	WATER	0	3	1K	21					
85/02/21	0930	WATER	0		1	33	.06	.030	.100K	.010	.010
85/03/18	1045	WATER	0	4	1	25					
85/04/22	0845	WATER	0	5	1	33					
85/05/22	1200	WATER	0	6	3	39	.13	.020	.200	.040	.030
85/06/18	1015	WATER	0	5	5	35					
85/07/10	1040	WATER	0	6	5	19					
85/08/06	1100	WATER	0	7	6	57	.11	.010	.200	.040	.020
85/09/11	1030	WATER	0.1	6	3	48					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/06	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/22	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/06	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03441440 LITTLE RIVER ABOVE HIGH FALLS, NEAR CEDAR MOUNTAIN, NC

LOCATION.--Lat 35°11'32", long 82°36'49", Transylvania County, Hydrologic Unit 06010105, on left bank 100 ft upstream from High Falls, 0.2 mi upstream from Grassy Creek, 1.0 mi downstream from Reasonover Creek, 3.8 mi northeast of Cedar Mountain, and at mile 7.8.

DRAINAGE AREA.--26.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,513.27 ft above National Geodetic Vertical Datum of 1929 (Tennessee Valley Authority bench mark).

REMARKS.--Records good. E. I. du Pont de Nemours and Company plant 0.5 mi above gage diverted about 1.2 ft^3/s for industrial use. Since 1969, more than 7.82 mi^2 of total drainage affected by occasional filling and/or draining of recreational lakes on tributaries upstream.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--23 years, 107 ft^3/s, 54.22 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,600 ft^3/s Oct. 4, 1964, gage height, 7.30 ft; minimum, 7.0 ft^3/s Sept. 24, 1981, gage height, 1.13 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Aug. 17	2100	*925	*3.38	No other peak greater than base discharge.			

Minimum daily discharge, 25 ft^3/s June 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	84	66	48	228	91	44	48	43	85	136	81
2	32	80	64	79	247	85	39	59	41	62	104	75
3	31	77	91	128	165	80	37	62	40	45	86	70
4	30	121	76	143	128	84	36	51	38	63	74	67
5	29	113	100	110	123	89	39	48	36	101	e64	64
6	30	94	118	89	135	86	81	47	34	74	e57	81
7	28	88	98	82	119	84	55	57	45	73	e62	94
8	30	83	88	76	104	84	48	85	73	60	66	69
9	30	79	83	72	95	87	44	67	42	47	61	67
10	32	82	78	68	91	85	41	70	39	43	53	66
11	29	129	76	68	114	82	38	68	37	40	65	69
12	27	96	71	63	309	82	37	222	38	38	75	60
13	26	87	65	62	183	71	39	178	33	58	70	58
14	26	83	62	61	149	63	36	136	31	45	57	54
15	27	80	61	59	132	61	133	133	31	42	52	52
16	27	77	59	55	120	60	127	106	34	44	50	57
17	26	75	61	63	111	59	99	94	29	34	525	50
18	26	73	68	63	105	55	80	83	29	30	441	53
19	26	79	68	60	103	53	69	74	27	28	206	56
20	31	65	66	55	101	55	63	68	27	27	153	58
21	53	53	64	41	97	56	70	65	25	27	129	59
22	74	51	63	e52	93	79	70	63	25	34	108	56
23	57	48	55	e52	87	74	64	58	28	50	95	53
24	63	46	53	e50	87	67	64	54	44	37	96	55
25	64	45	54	50	94	64	62	51	28	61	194	50
26	46	43	53	51	137	56	57	48	27	108	146	47
27	38	42	51	51	110	47	57	46	30	66	125	50
28	64	141	49	54	97	48	56	46	42	148	109	42
29	114	95	50	54	---	49	52	47	57	177	101	41
30	97	74	49	50	---	44	50	43	103	138	107	40
31	91	---	48	70	---	42	---	44	---	135	91	---
TOTAL	1342	2383	2108	2079	3664	2122	1787	2321	1156	2020	3758	1794
MEAN	43.3	79.4	68.0	67.1	131	68.5	59.6	74.9	38.5	65.2	121	59.8
MAX	114	141	118	143	309	91	133	222	103	177	525	94
MIN	26	42	48	41	87	42	36	43	25	27	50	40
CFSM	1.62	2.96	2.54	2.50	4.89	2.56	2.22	2.79	1.44	2.43	4.51	2.23
IN.	1.86	3.31	2.93	2.89	5.09	2.95	2.48	3.22	1.60	2.80	5.22	2.49

CAL YR 1984	TOTAL	38691	MEAN	106	MAX	481	MIN	26	CFSM	3.96	IN. 53.71
WTR YR 1985	TOTAL	26534	MEAN	72.7	MAX	525	MIN	25	CFSM	2.71	IN. 36.83

e Estimated

03441440 LITTLE RIVER ABOVE HIGH FALLS NEAR CEDAR MOUNTAIN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/15	1320	WATER	0	1.54	59	28	6.50	4.0		10.9	30
85/02/21	1210	WATER	0	1.72	96	14		5.0	4.4	12.0	10K
85/03/18	1300	WATER	0	1.53	57	27	6.50	7.0		10.0	10
85/04/22	1230	WATER	0	1.60	72	30	6.70	16.0		8.7	10
85/05/22	1415	WATER	0	1.54	62	25	6.60	19.0	2.7	8.2	240
85/06/18	1345	WATER	0	1.34	31	40	6.50	21.5		7.7	40
85/07/10	1415	WATER	0	1.44	43	35	6.70	22.0		7.4	70
85/08/06	1445	WATER	0	1.57	64	26	6.60	20.0	2.1	8.0	25
85/09/11	1400	WATER	0.1	1.58	68	31	6.70	23.5		6.6	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/15	1320	WATER	0	6	3	36					
85/02/21	1210	WATER	0		4	44	.05	.070	.200	.010K	.010K
85/03/18	1300	WATER	0	6	5	28					
85/04/22	1230	WATER	0	10	4	32					
85/05/22	1415	WATER	0	9	6	58	.04	.200	.300	.020	.010K
85/06/18	1345	WATER	0	10	4	41					
85/07/10	1415	WATER	0	9	6	24					
85/08/06	1445	WATER	0	9	6	48	.05	.240	.600	.030	.010K
85/09/11	1400	WATER	0.1	11	4	42					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/21	1210	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/22	1415	WATER	0	10K	20K	50K	50K	100K	.2K	100K	20K
85/08/06	1445	WATER	0	10K	20K	50K	20K	100K	.5	100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC

LOCATION.--Lat 35°17'56", long 82°37'26", Transylvania County, Hydrologic Unit 06010105, on left bank 40 ft upstream from bridge on Secondary Road 1503, 700 ft east of railroad at Blantyre, 3.5 mi downstream from Little River, and at mile 183.7.

DRAINAGE AREA.--296 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 923: 1921-23, 1929, 1933, 1935-36(M), 1938, 1940.

GAGE.--Water-stage recorder. Datum of gage is 2,060.32 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Prior to July 5, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good, except those above 2,600 ft³/s, which are fair. Considerable diurnal fluctuation at low flow caused by powerplant about 8 mi above station. The National Weather Service has a telephone telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--65 years, 997 ft³/s, 45.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s Oct. 5, 1964, gage height, 25.50 ft, from floodmarks; minimum, 119 ft³/s Oct. 1, 1954, gage height, 2.36 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1791, 27.1 ft July 16, 1916, from floodmarks (from studies by Tennessee Valley Authority).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 19	0030	*4,600	*16.72	No other peak greater than base discharge.			

Minimum discharge, 270 ft³/s June 23, gage height, 4.53 ft; minimum daily, 273 ft³/s June 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	550	665	455	e2120	872	565	489	439	711	e1150	734
2	437	518	624	651	2730	848	501	534	403	581	e849	684
3	412	512	803	e1040	e1820	815	485	646	396	436	780	648
4	404	689	711	1420	1230	789	479	556	383	376	702	585
5	394	902	e907	e1120	1130	782	478	511	366	592	641	563
6	390	672	1340	899	1320	747	953	489	354	490	607	552
7	389	591	1010	809	1110	720	e729	477	365	550	648	709
8	398	550	848	749	968	702	617	563	592	451	772	566
9	426	526	776	703	874	666	584	659	445	375	685	587
10	432	519	725	673	831	651	561	678	381	450	605	606
11	420	966	691	660	e977	637	548	659	370	374	589	621
12	394	742	657	632	e3010	635	535	1380	401	374	639	559
13	387	630	630	601	e1880	619	525	e1480	414	572	714	547
14	366	583	604	598	1380	613	546	e1080	337	507	528	520
15	389	556	585	585	1180	607	e827	933	320	388	461	489
16	376	539	569	556	1050	591	e1280	807	331	502	396	473
17	378	519	556	615	970	587	e1030	738	321	456	e2410	465
18	396	502	553	631	916	573	896	691	322	369	4450	457
19	374	548	545	592	883	557	820	635	327	328	e3900	447
20	325	573	545	569	880	552	770	594	311	308	1570	436
21	379	489	543	395	835	549	732	559	289	303	1200	428
22	492	470	550	e449	806	689	698	547	279	326	969	422
23	542	460	543	558	791	747	648	569	273	548	853	413
24	548	451	503	546	779	654	585	550	389	557	809	434
25	500	440	512	558	824	624	563	536	327	607	e1240	437
26	452	432	486	496	1180	601	525	508	342	995	1220	403
27	424	427	500	482	1010	586	524	492	317	e856	1030	449
28	496	e1180	490	535	916	577	523	473	395	e1040	895	419
29	753	e1100	477	508	---	571	502	503	533	e1320	835	382
30	684	757	467	491	---	554	478	469	655	e1040	829	372
31	642	---	461	644	---	541	---	454	---	1280	794	---
TOTAL	13875	18393	19876	20220	34400	20256	19507	20259	11377	18062	33770	15407
MEAN	448	613	641	652	1229	653	650	654	379	583	1089	514
MAX	753	1180	1340	1420	3010	872	1280	1480	655	1320	4450	734
MIN	325	427	461	395	779	541	478	454	273	303	396	372
CFSM	1.51	2.07	2.17	2.20	4.15	2.21	2.20	2.21	1.28	1.97	3.68	1.74
IN.	1.74	2.31	2.50	2.54	4.32	2.55	2.45	2.55	1.43	2.27	4.24	1.94

CAL YR 1984 TOTAL 410354 MEAN 1121 MAX 4380 MIN 325 CFSM 3.79 IN. 51.57
WTR YR 1985 TOTAL 245402 MEAN 672 MAX 4450 MIN 273 CFSM 2.27 IN. 30.84

e Estimated

TENNESSEE RIVER BASIN

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	1320	WATER	0	5.78	501	135	6.90	18.0		7.8	340
84/11/06	1220	WATER	0	6.59	662	99	6.90	13.0	4.1	9.5	180
84/12/10	1220	WATER	0	6.89	723	98	6.70	5.0		10.0	110
85/01/15	1400	WATER	0	6.02	549	102	6.90	2.0		11.9	20
85/02/21	1240	WATER	0	7.41	832	82		7.0	5.0	11.4	50
85/03/18	1330	WATER	0	6.14	573	105	6.90	9.0		10.0	130
85/04/22	1315	WATER	0	6.76	697	104	7.10	17.0		8.7	130
85/05/22	1500	WATER	0	6.02	549	58	7.10	19.0	4.3	8.1	180
85/06/18	1500	WATER	0	4.95	335	141	7.20	23.0		7.1	550
85/07/10	1515	WATER	0	5.90	525	100	7.10	22.0		7.0	1900
85/08/06	1545	WATER	0	6.30	604	86	7.10	20.0	5.4	7.9	210
85/09/11	1500	WATER	0.1	6.42	589	120	7.20	21.0		7.4	1300

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	1320	WATER	0	23	21	120					
84/11/06	1220	WATER	0	16	13	78	.16	.110	.500	.060	.010
84/12/10	1220	WATER	0	17	7	79					
85/01/15	1400	WATER	0	20	5	100					
85/02/21	1240	WATER	0		10	91	.19	.030	.200	.030	.010K
85/03/18	1330	WATER	0	21	7	85					
85/04/22	1315	WATER	0	21	20	95					
85/05/22	1500	WATER	0	19	21	110	.23	.060	.400	.060	.010K
85/06/18	1500	WATER	0	31	13	120					
85/07/10	1515	WATER	0	21	56	130					
85/08/06	1545	WATER	0	19	24	100	.26	.100	.500	.060	.010K
85/09/11	1500	WATER	0.1	21	21	90					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/06	1220	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	1240	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/22	1500	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/06	1545	WATER	0	10K	20K	50K	20K	100K		100K	60

K Less than noted value.

TENNESSEE RIVER BASIN

03446000 MILLS RIVER NEAR MILLS RIVER, NC

LOCATION.--Lat 35°23'55", long 82°35'42", Henderson County, Hydrologic Unit 06010105, on right bank 1.5 mi downstream from confluence of North and South Forks, 1.8 mi northwest of Mills River, 4.2 mi northwest of Horseshoe, and at mile 4.6.

DRAINAGE AREA.--66.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1924 to September 1926, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 923: 1935, 1937, 1939. WSP 1003: 1938, 1940-42. WSP 1143: 1940(P). WSP 1276: 1926.

GAGE.--Water-stage recorder. Datum of gage is 2,088.47 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Prior to Oct. 1, 1926, nonrecording gage at site 500 ft upstream at datum 2.97 ft higher.

REMARKS.--Records good. City of Hendersonville diverted an average of about 4.7 ft³/s from North Fork and Bradley Creek for municipal water supply.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--56 years, 169 ft³/s, 34.41 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s Aug. 30, 1940, gage height, 13.62 ft, from rating curve extended above 6,200 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 16 ft³/s Dec. 24, 1943; minimum gage height, 1.32 ft, Jan. 21, 1985, result of freezeup; minimum daily, 18 ft³/s Sept. 30, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--The greatest flood since 1876 is probably that of Aug. 30, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	1445	*2,320	*6.20	No other peak greater than base discharge.			

Minimum discharge, 18 ft³/s Jan. 21, gage height, 1.32 ft, result of freezeup; minimum daily, 40 ft³/s June 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	71	100	68	292	127	96	101	75	150	155	117
2	70	70	97	107	331	123	86	103	73	87	123	109
3	68	70	110	184	228	119	85	108	72	63	103	108
4	67	106	93	225	176	114	84	97	68	60	89	109
5	66	106	118	180	166	114	88	97	66	60	80	105
6	65	84	151	144	172	109	182	94	63	57	75	105
7	67	77	122	128	151	105	120	91	67	63	86	119
8	69	74	114	116	e128	103	109	106	85	51	86	103
9	73	71	107	109	e128	107	106	119	66	46	83	110
10	71	82	100	102	e121	101	103	122	62	45	71	111
11	67	158	96	99	151	99	99	116	60	48	67	99
12	65	99	92	93	392	98	96	146	60	62	84	92
13	64	87	89	e78	247	95	95	211	55	95	72	94
14	64	82	86	e91	207	94	103	142	52	71	64	87
15	62	82	84	e76	183	92	302	132	51	60	61	83
16	63	76	83	e76	e155	89	294	119	52	59	64	80
17	64	74	80	e95	e155	91	222	118	49	52	1270	78
18	67	73	79	e84	147	88	185	113	54	49	629	76
19	68	81	78	87	143	86	166	106	51	47	331	73
20	64	79	77	e68	138	85	153	101	47	47	242	71
21	74	72	77	e65	131	86	144	98	46	51	200	70
22	97	70	82	e133	128	131	137	97	43	57	169	70
23	95	69	77	e135	128	123	131	95	44	78	152	69
24	118	68	73	e112	126	108	130	93	60	103	150	80
25	113	68	74	107	134	103	125	91	49	140	186	73
26	84	66	72	e91	165	97	116	87	49	122	161	75
27	73	65	71	e76	140	94	114	84	40	91	158	81
28	83	217	70	101	131	93	114	84	43	123	141	68
29	102	145	70	88	---	91	108	87	66	165	142	66
30	85	113	69	78	---	88	103	81	105	139	146	65
31	75	---	68	104	---	90	---	79	---	174	129	---
TOTAL	2341	2655	2759	3300	4894	3143	3996	3318	1773	2515	5569	2646
MEAN	75.5	88.5	89.0	106	175	101	133	107	59.1	81.1	180	88.2
MAX	118	217	151	225	392	131	302	211	105	174	1270	119
MIN	62	65	68	65	121	85	84	79	40	45	61	65
CFSM	1.13	1.33	1.33	1.59	2.62	1.51	1.99	1.60	.89	1.22	2.70	1.32
IN.	1.31	1.48	1.54	1.84	2.73	1.75	2.23	1.85	.99	1.40	3.11	1.48

CAL YR 1984	TOTAL	69377	MEAN	190	MAX	936	MIN	62	CFSM	2.85	IN. 38.69
WTR YR 1985	TOTAL	38909	MEAN	107	MAX	1270	MIN	40	CFSM	1.60	IN. 21.70

e Estimated

03446000 HILLS RIVER NEAR HILLS RIVER, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/25	0900	WATER	0	2.03	119	14	6.20	16.0		8.8	390
84/11/06	0900	WATER	0	1.87	85	13	6.60	8.0	1.0	10.6	100
84/12/10	1010	WATER	0	1.95	101	14	6.80	3.0		10.8	30
85/01/15	0930	WATER	0	1.89	89	15		.0		12.8	10
85/02/21	0900	WATER	0	2.08	130	14		4.0	1.0K	12.8	90
85/03/18	1000	WATER	0	1.89	89	14	7.20	5.0		11.6	10
85/04/22	0800	WATER	0	2.11	140	22	6.20	13.0		9.8	70
85/05/22	0915	WATER	0	1.90	97	14	6.60	15.0	1.5	9.3	90
85/06/18	0930	WATER	0	1.70	57	30	6.50	18.0		8.7	210
85/07/10	0930	WATER	0	1.62	46	13	6.00	18.0		8.6	250
85/08/06	1000	WATER	0	1.81	75	17	6.90	18.0	1.3	9.2	280
85/09/11	0945	WATER	0.1	1.93	97	20	6.60	18.5		8.5	280

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/25	0900	WATER	0	3	5	34					
84/11/06	0900	WATER	0	4	3	18	.07	.070	.300	.010	.010K
84/12/10	1010	WATER	0	4	1	16					
85/01/15	0930	WATER	0		1K	25					
85/02/21	0900	WATER	0		2	32	.12	.020	.100	.020	.010K
85/03/18	1000	WATER	0	5	1	8					
85/04/22	0800	WATER	0	4	4	38					
85/05/22	0915	WATER	0	8	5	39	.07	.020	.100	.010	.010K
85/06/18	0930	WATER	0	7	6	33					
85/07/10	0930	WATER	0	2	6	22					
85/08/06	1000	WATER	0	6	9	43	.08	.040	.200	.010	.010K
85/09/11	0945	WATER	0.1	6	12	47					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/06	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/21	0900	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/22	0915	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/06	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03448000 FRENCH BROAD RIVER AT BENT CREEK, NC

LOCATION.--Lat 35°30'07", long 82°35'33", Buncombe County, Hydrologic Unit 06010105, on left bank 50 ft downstream from Bent Creek, 6.2 mi upstream from Hominy Creek, 6.7 mi south of Asheville, and at mile 157.7.

DRAINAGE AREA.--676 mi^2.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,995.91 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by powerplant about 34 mi above station. Several measurements of water temperatures were made during the year.

AVERAGE DISCHARGE.--52 years, 1,698 ft^3/s, 34.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,600 ft^3/s Oct. 5, 1964, gage height, 15.80 ft; minimum, 230 ft^3/s Oct. 4, 5, 10, 11, 12, 1954, gage height, 2.05 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1791, 27.3 ft July 15, 1916 (from floodmarks and studies by Tennessee Valley Authority). Flood in August 1928 reached a stage of about 16.1 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 17	2330	*6,350	*6.37	No other peak greater than base discharge.			

Minimum discharge, 453 ft^3/s June 23, gage height, 2.39 ft; minimum daily, 467 ft^3/s June 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	786	885	1090	765	2850	1410	901	804	708	1200	1740	1160
2	760	819	1000	890	4610	1350	862	839	683	1010	1490	1060
3	708	794	1150	1690	3600	1300	815	962	661	771	1180	991
4	688	890	1160	2450	2210	1250	802	932	635	658	1040	956
5	677	1330	1250	2080	1840	1230	796	840	615	808	934	980
6	666	1100	2010	1560	2070	1180	1350	805	597	828	872	891
7	665	929	1700	1320	1880	1140	1310	782	614	807	883	1000
8	671	856	1370	1200	1610	1120	1020	823	755	744	1060	976
9	693	822	1230	1110	1450	1090	948	1030	814	632	1020	983
10	714	828	1130	1050	1370	1040	902	1040	645	586	894	954
11	704	1430	1090	1030	1410	1010	877	1040	616	664	825	1040
12	668	1310	1040	990	4840	1010	859	1330	634	597	886	902
13	646	1020	1000	913	4060	977	843	2430	639	676	926	886
14	630	932	966	907	2490	964	867	1800	597	907	855	852
15	621	887	937	898	2030	957	1290	1440	554	763	723	799
16	627	874	908	843	1790	933	2570	1250	550	657	672	768
17	631	822	879	905	1650	927	2020	1170	548	754	3450	760
18	674	799	867	974	1550	912	1630	1060	533	645	5940	735
19	669	806	862	929	1490	886	1420	973	540	566	5010	726
20	621	901	857	890	1440	874	1300	913	537	527	3690	711
21	649	814	858	e800	1380	865	1220	865	504	506	2030	700
22	807	767	880	e900	1320	1050	1170	839	475	602	1570	698
23	896	745	888	e900	1290	1240	1130	837	467	625	1370	692
24	1000	732	832	e920	1260	1090	1070	830	503	900	1280	697
25	969	721	825	e920	1290	1010	1060	820	595	985	1870	717
26	815	711	814	e930	1860	956	947	787	554	1250	2000	693
27	738	712	799	e920	1770	926	911	760	497	1350	1670	733
28	749	1390	807	e900	1530	946	905	743	499	1420	1470	711
29	978	1970	794	e880	---	904	872	777	719	2070	1370	659
30	1130	1310	787	e880	---	885	830	756	1030	1690	1460	646
31	946	---	769	904	---	863	---	729	---	1820	1340	---
TOTAL	23196	28906	31549	33248	57940	32295	33497	31006	18318	28018	51520	25076
MEAN	748	964	1018	1073	2069	1042	1117	1000	611	904	1662	836
MAX	1130	1970	2010	2450	4840	1410	2570	2430	1030	2070	5940	1160
MIN	621	711	769	765	1260	863	796	729	467	506	672	646
CFSM	1.11	1.43	1.51	1.59	3.06	1.54	1.65	1.48	.90	1.34	2.46	1.24
IN.	1.28	1.59	1.74	1.83	3.19	1.78	1.84	1.71	1.01	1.54	2.84	1.38

CAL YR 1984	TOTAL	686483	MEAN	1876	MAX	8090	MIN	621	CFSM	2.78	IN.	37.78
WTR YR 1985	TOTAL	394569	MEAN	1081	MAX	5940	MIN	467	CFSM	1.60	IN.	21.71

e Estimated

TENNESSEE RIVER BASIN

03451000 SWANNANOA RIVER AT BILTMORE, NC

LOCATION.--Lat 35°34'06", long 82°32'42", Buncombe County, Hydrologic Unit 06010105, on left bank at Biltmore, 100 ft downstream from Biltmore Avenue Bridge, 200 ft upstream from Southern Railway bridge, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--130 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to September 1926, May 1934 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 803: 1921(M), 1923(M), 1925(M). WSP 823: Drainage area. WSP 1306: 1921(M), 1924(M), 1926(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,976.58 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Dec. 1, 1920 to Sept. 30, 1926, nonrecording gage at site 100 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Considerable regulation by Lake Craig 3.6 mi above station from 1925 to 1950 (reservoir silted). City of Asheville diverted an average of 34.2 ft^3/s for water supply from Burnett Lake on North Fork Swannanoa River 20 mi above station (station 03448959); an average of 37.1 ft^3/s was discharged as sewage effluent into the French Broad River below station. Textile mills, the town of Black Mountain, and recreational camps diverted about 8 ft^3/s above station, of which about half was discharged into the French Broad River below station. Complete record of diversions and return water not available. The National Weather Service has a telephone telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--58 years (1921-26, 1934-85), 161 ft^3/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft^3/s Aug. 13, 1940, gage height, 19.00 ft, from rating curve extended above 9,100 ft^3/s on basis of computation of peak flow over dam 3.6 mi above station; minimum, 1.1 ft^3/s Oct. 9, 14, 15, 1941; minimum daily, 1.2 ft^3/s Oct. 14, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed, 26 ft, discharge, 40,000 ft^3/s in April 1791, from studies by Tennessee Valley Authority. Flood of July 1916 reached a stage of 20.7 ft, discharge, 23,000 ft^3/s, from flood profile by Tennessee Valley Authority. Flood of Aug. 16, 1928, reached a stage of 18.74 ft, from floodmarks, discharge, 17,800 ft^3/s. High stages are subject to backwater from French Broad River.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,470 ft^3/s Feb. 12, gage height, 4.84 ft; minimum discharge, 14 ft^3/s July 23 gage height, 1.22 ft; minimum daily, 23 ft^3/s July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	40	61	47	258	102	75	69	43	68	128	65
2	40	41	66	74	305	102	60	74	46	54	122	56
3	40	43	69	139	180	94	59	82	50	39	88	52
4	35	53	56	157	128	88	58	70	39	47	75	49
5	38	53	87	117	127	88	78	68	45	51	60	45
6	41	48	87	92	125	79	159	60	39	46	53	42
7	42	44	69	78	105	75	91	57	60	64	69	46
8	38	45	66	71	88	74	78	63	74	37	97	48
9	36	42	65	65	88	82	74	68	50	29	71	57
10	39	79	57	66	86	77	71	65	36	31	63	67
11	37	141	57	66	144	71	68	70	43	35	62	43
12	32	56	53	64	755	71	66	100	49	47	51	43
13	39	45	53	65	242	67	69	131	41	33	49	41
14	38	44	51	60	170	66	77	83	35	31	46	42
15	32	39	53	59	141	65	215	65	33	63	41	42
16	34	43	54	56	121	65	273	59	38	51	47	35
17	35	40	48	56	113	70	170	88	32	35	493	32
18	36	47	48	53	102	63	135	77	36	29	314	32
19	36	52	47	54	101	58	116	67	31	26	150	32
20	40	46	49	52	99	58	109	57	28	28	110	31
21	51	45	49	26	94	59	101	53	27	30	93	34
22	58	49	64	50	92	79	88	55	26	29	77	35
23	79	48	60	47	96	79	82	51	100	23	68	29
24	66	44	55	49	98	80	116	51	35	69	82	36
25	50	48	57	53	121	73	129	54	28	220	108	33
26	49	45	49	46	152	65	95	53	42	158	103	29
27	45	40	50	47	121	64	90	50	27	160	118	30
28	51	213	49	49	110	63	87	48	28	115	83	32
29	53	98	53	51	---	62	77	51	31	101	71	32
30	45	69	53	49	---	63	71	44	75	105	79	26
31	41	---	48	83	---	67	---	41	---	146	70	---
TOTAL	1342	1740	1783	2041	4362	2269	3037	2024	1267	2000	3141	1216
MEAN	43.3	58.0	57.5	65.8	156	73.2	101	65.3	42.2	64.5	101	40.5
MAX	79	213	87	157	755	102	273	131	100	220	493	67
MIN	32	39	47	26	86	58	58	41	26	23	41	26

CAL YR 1984 TOTAL 59059 MEAN 161 MAX 2050 MIN 30
WTR YR 1985 TOTAL 26222 MEAN 71.8 MAX 755 MIN 23

03451000 SWANNANOA RIVER AT BILTMORE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/10	1530	WATER	0.1			50	6.50	4.0		13.4	230
85/01/15	1530	WATER	0	1.47	53	44	6.90	1.0		13.0	35
85/02/28	2110	WATER	0	1.74	111	54		8.0	2.0	10.1	1800
85/03/29	1545	WATER	0	1.49	57	46	7.90	17.0		12.0	100
85/04/16	1030	WATER	0	2.24	254	38	6.70	12.0		9.9	3400
85/05/24	1100	WATER	0	1.42	44	59	6.70	16.5	3.4	8.2	480
85/06/07	1330	WATER	0	1.36	33	81	7.00	24.0		7.9	3800
85/07/26	1330	WATER	0	1.81	129	45	7.10	22.5	.3	8.0	4600
85/08/27	1350	WATER	0.1	1.66	92	53	6.90	21.0	50.0	8.4	7000
85/09/18	1300	WATER	0.1	1.26	20	58	7.30	17.0		10.2	1300

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/10	1530	WATER	0.1	14	8	61					
85/01/15	1530	WATER	0	14	5	47	.30	.050	.100	.030	.010K
85/02/28	2110	WATER	0		4	52	.43	.290	.400	.040	.010K
85/03/29	1545	WATER	0	15	5	62	.29	.110	.300	.060	.020
85/04/16	1030	WATER	0	10	73	110	.33	.100	.400	.140	.010K
85/05/24	1100	WATER	0	18	12	65	.38	.120	.400	.040	.010K
85/06/07	1330	WATER	0	18	29	99	.44	.050	.500	.080	.010K
85/07/26	1330	WATER	0	13	120	210	.26	.060	.500	.150	.010K
85/08/27	1350	WATER	0.1	15	56	120	.22	.010	.300	.110	.010K
85/09/18	1300	WATER	0.1	19	2	69	.24	.020	.200	.030	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/28	2110	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/24	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	1350	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03451500 FRENCH BROAD RIVER AT ASHEVILLE, NC

LOCATION.--Lat 35°36'33", long 82°34'43", Buncombe County, Hydrologic Unit 06010105, on right bank 27 ft upstream from Pearson Bridge (Secondary Road 1348) at Asheville, 1.4 mi downstream from bridge on U.S. Highways 19 and 23, 3.2 mi downstream from Swannanoa River, and at mile 145.8.

DRAINAGE AREA.--945 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1895 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1306: 1895-1909, 1901(M), 1914-15(M), 1917(M), 1920-22(M), 1927(M).

GAGE.--Water-stage recorder. Datum of gage is 1,950.28 ft above National Geodetic Vertical Datum of 1929. Sept. 17, 1895 to Dec. 31, 1901, nonrecording gage at present site at different datum. Mar. 19, 1903 to July 15, 1916, and Jan. 1, 1917 to Sept. 30, 1922, nonrecording gage at Smith Bridge 1.5 mi upstream at datum 11.52 ft higher. Oct. 1, 1922 to Aug. 9, 1930, nonrecording gage at present site and datum.

REMARKS.--Records good. Many small diversions from tributaries above station for water supply. Diversions by city of Asheville and others from upstream tributaries in the Swannanoa River basin totaled about 42.2 ft³/s, see sta 03451000, of which 37.1 ft³/s was discharged as sewage effluent 4 mi downstream station. Slight diurnal fluctuation and occasional slight regulation at low flow caused by powerplant 46 mi upstream and small reservoirs above station. The National Weather Service has a telephone telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--90 years, 2,091 ft³/s, 30.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 110,000 ft³/s July 16, 1916, gage height, 23.1 ft, present site and datum, from floodmarks, from rating curve extended above 43,000 ft³/s; minimum, 239 ft³/s at times in August and September 1925, gage height, 0.16 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed since at least 1791, that of July 16, 1916, and flood of June 17, 1876, reached a stage of 18 ft, from studies by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	2130	*7,670	*5.03				

Minimum discharge, 573 ft³/s June 22, 23, 27, 28 gage height, 1.08 ft; minimum daily, 587 ft³/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	936	1060	1340	951	3120	1800	1170	1050	856	1460	2090	1380
2	920	983	1240	1060	5390	1730	1110	1080	838	1270	1900	1260
3	875	972	1340	1830	4340	1640	1040	1230	855	976	1480	1180
4	847	1030	1410	2830	2750	1570	1020	1220	845	820	1290	1110
5	836	1480	1420	2550	2240	1560	1030	1090	817	906	1150	1120
6	844	1360	2240	1920	2440	1480	1710	1030	795	1020	1050	1030
7	832	1120	2040	1630	2290	1420	1720	1000	838	980	1080	1140
8	833	1040	1640	1480	1940	1400	1350	1030	986	920	1280	1190
9	848	1000	1490	1370	1740	1400	1250	1270	1040	781	1270	1130
10	878	1050	1380	1300	1670	1340	1190	1310	834	689	1110	1120
11	864	1710	1330	1270	1740	1290	1170	1330	787	786	1000	1180
12	835	1620	1270	1230	5950	1280	1130	1570	796	738	1010	1050
13	820	1250	1220	1140	5090	1250	1100	2820	777	735	1060	1010
14	815	1120	1190	1140	3210	1230	1150	2230	741	1050	1050	977
15	796	1080	1150	1120	2550	1220	1570	1730	672	953	854	923
16	804	1050	1120	1050	2260	1200	3210	1530	656	805	794	872
17	808	1000	1070	1110	2060	1200	2580	1490	656	876	3820	840
18	826	983	1060	1190	1940	1170	2100	1340	669	772	6830	811
19	878	996	1050	1150	1860	1130	1820	1240	654	679	5620	800
20	831	1060	1050	e1100	1810	1110	1680	1160	644	613	4330	787
21	848	1010	1050	e1100	1740	1100	1580	1090	622	591	2480	790
22	960	948	1090	e1100	1660	1290	1480	1060	590	664	1910	788
23	1150	926	1100	e1100	1630	1570	1400	1040	713	751	1640	778
24	1180	910	1030	e1100	1610	1420	1370	1040	623	1050	1540	779
25	1230	908	1020	e1100	1660	1310	1410	1030	708	1400	2050	804
26	1020	890	1010	e1100	2220	1230	1250	994	661	1570	2430	784
27	931	883	982	e1100	2190	1190	1200	958	626	1700	2090	815
28	931	1680	976	e1000	1930	1210	1200	927	587	1610	1790	810
29	1140	2380	969	e1000	---	1180	1150	957	762	2370	1570	766
30	1320	1630	971	e1000	---	1160	1080	935	1180	2050	1750	727
31	1130	---	956	1190	---	1140	---	878	---	2150	1600	---
TOTAL	28766	35129	38204	40311	71030	41220	43220	38659	22828	33735	60918	28751
MEAN	928	1171	1232	1300	2537	1330	1441	1247	761	1088	1965	958
MAX	1320	2380	2240	2830	5950	1800	3210	2820	1180	2370	6830	1380
MIN	796	883	956	951	1610	1100	1020	878	587	591	794	727
CFSM	.98	1.24	1.30	1.38	2.68	1.41	1.52	1.32	.81	1.15	2.08	1.01
IN.	1.13	1.38	1.50	1.59	2.80	1.62	1.70	1.52	.90	1.33	2.40	1.13

CAL YR 1984 TOTAL 840152 MEAN 2295 MAX 12600 MIN 796 CFSM 2.43 IN. 33.07
WTR YR 1985 TOTAL 482771 MEAN 1323 MAX 6830 MIN 587 CFSM 1.40 IN. 19.00

e Estimated

03451500 FRENCH BROAD RIVER AT ASHEVILLE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/19	1445	WATER	0	1.31	850	110	7.00	20.0	20.0	7.9	55000
84/11/16	1520	WATER	0	1.49	1040	80	7.00	8.0	4.4	11.2	3400
84/12/10	1610	WATER	0	1.73	1360	71	6.80	4.0	3.3	10.4	610
85/01/24	1500	WATER	0	1.51	1060	90	7.00	.0		12.2	620
85/02/26	1530	WATER	0	2.40	2350	38	7.00	12.0	25.0	9.2	6400
85/03/11	1320	WATER	0	1.68	1290	76	6.70	12.0		10.1	330
85/04/12	1415	WATER	0	1.55	1120	89	7.20	13.0		10.6	390
85/05/03	1115	WATER	0	1.61	1200	114	7.10	11.0	7.5	8.8	830
85/06/07	1215	WATER	0	1.30	800	130	7.20	24.5		7.6	2000
85/07/26	1200	WATER	0	1.83	1500	76	7.20	22.0		7.6	8300
85/08/27	1300	WATER	0.1	2.20	2040	65	7.20	20.5	20.0	8.2	3100
85/09/18	1200	WATER	0.1	1.31	812	69	7.60	17.5		9.8	210

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/19	1445	WATER	0	24	32	140	.43	.100	.400	.180	.040
84/11/16	1520	WATER	0	19	15	91	.34	.130	.300	.100	.030
84/12/10	1610	WATER	0	15	8	84	.35	.070	.200	.050	.010
85/01/24	1500	WATER	0	25	19	94	.39	.220	.400	.090	.010K
85/02/26	1530	WATER	0	19	64	130	.45	.260	.600	.190	.070
85/03/11	1320	WATER	0	18	13	84	.36	.060	1.800	.070	.010
85/04/12	1415	WATER	0	23	15	97	.35	.070	.400	.080	.020
85/05/03	1115	WATER	0	23	25	100	.34	.070	.300	.120	.020
85/06/07	1215	WATER	0	24	12	97	.61	.040	.200	.090	.040
85/07/26	1200	WATER	0	19	120	220	.66	.160	.600	.270	.030
85/08/27	1300	WATER	0.1	17	61	120	.52	.040	.400	.130	.030
85/09/18	1200	WATER	0.1	22	5	55	.48	.040	.200	.050	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/16	1520	WATER	0	10K	20K	50K	20K	100K	.2K	100K	50
85/02/26	1530	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/03	1115	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	1300	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03453500 FRENCH BROAD RIVER AT MARSHALL, NC
(National stream-quality accounting network station)

LOCATION.--Lat 35°47'10", long 82°39'39", Madison County, Hydrologic Unit 06010105, on right bank 0.7 mi upstream from Hayes Creek, 1.0 mi downstream from Ivy River, 1.5 mi southeast of Marshall, and at mile 126.7.

DRAINAGE AREA.--1,332 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WSP 1436: 1954(M).

GAGE.--Water-stage recorder. Datum of gage is 1,646.79 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).

REMARKS.--Records good. Small diversions from tributaries for water supply. Slight diurnal fluctuation and occasional slight regulation at low flow caused by small reservoirs above station. Prior to July 1963, some regulation by Weaverville plant of Carolina Power and Light Company 15 mi upstream.

AVERAGE DISCHARGE.--43 years, 2,466 ft^3/s, 25.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,000 ft^3/s Nov. 6, 1977, gage height, 13.64 ft; minimum, 193 ft^3/s Sept. 13, 14, 1954, gage height, 0.36 ft; minimum daily, 292 ft^3/s Sept. 27, 28, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed since at least 1791, 22.0 ft July 16, 1916, discharge, 115,000 ft^3/s, and flood of Aug. 30, 1940, reached a stage of 16.6 ft, discharge, 70,000 ft^3/s, from highwater marks, flood profiles, and studies by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 12	1015	*9,430	*5.06				

Minimum discharge, 700 ft^3/s June 28, gage height, 0.98 ft; minimum daily, 734 ft^3/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	1250	1620	1120	4560	2280	1460	1250	992	1660	2660	1560
2	1090	1150	1470	1310	7150	2180	1420	1260	995	1580	2480	1400
3	1020	1110	1550	2120	6090	2060	1320	1380	1090	1210	1870	1320
4	986	1140	1650	3480	3820	1960	1290	1430	1030	997	1600	1250
5	966	1540	1620	3270	2900	1940	1270	1290	985	1050	1450	1240
6	964	1630	2400	2430	3030	1840	2030	1220	975	1150	1330	1200
7	932	1330	2420	2030	2880	1760	2160	1170	1070	1150	1340	1170
8	929	1220	1960	1810	2460	1720	1720	1170	1300	1110	1500	1350
9	972	1170	1750	1670	2150	1760	1570	1400	1250	979	1710	1210
10	1010	1170	1630	1570	2030	1670	1480	1500	1080	921	1410	1220
11	999	2050	1570	1540	2220	1610	1430	1500	981	1000	1250	1230
12	975	1920	1500	1470	8250	1590	1390	1550	995	945	1190	e1170
13	935	1500	1440	1370	6490	1560	1370	2970	970	920	1300	e1090
14	925	1330	1400	1350	4360	1530	1390	2840	936	1130	1260	e1040
15	911	1280	1360	1340	3340	1510	1660	2060	856	1150	1080	e994
16	918	1230	1320	1270	2860	1470	3700	1880	821	1050	1150	e953
17	928	1190	1280	1330	2590	1450	3180	1820	830	1020	4270	921
18	951	1140	1280	1400	2390	1440	2570	1700	881	980	7800	899
19	1020	1170	1280	1380	2370	1400	2220	1520	838	870	6520	871
20	954	1210	1250	1410	2420	1380	2020	1400	813	790	5380	854
21	974	1220	1260	e1400	2350	1370	1880	1330	803	754	3150	845
22	1050	1110	1330	e1400	2210	1470	1760	1270	753	837	2290	835
23	1270	1080	1340	e1350	2160	1850	1680	1230	738	1080	1910	831
24	1400	1060	1260	e1350	2120	1790	1650	1230	1030	1240	1770	836
25	1420	1060	1220	e1300	2130	1650	1720	1220	833	1570	2070	858
26	1220	1050	1210	e1300	2840	1540	1520	1170	833	2070	2780	844
27	1100	1040	1170	e1300	2890	1480	1430	1110	813	2250	2530	851
28	1080	1870	1130	e1300	2480	1470	1430	1080	734	1960	2130	865
29	1300	2860	1160	e1300	---	1460	1390	1090	805	2770	1810	816
30	1500	2090	1150	e1250	---	1430	1300	1090	1240	2570	1920	775
31	1360	---	1140	e1500	---	1400	---	1040	---	2560	1790	---
TOTAL	33129	41170	45120	49420	93540	51020	52410	45170	28270	41323	72700	31298
MEAN	1069	1372	1455	1594	3341	1646	1747	1457	942	1333	2345	1043
MAX	1500	2860	2420	3480	8250	2280	3700	2970	1300	2770	7800	1560
MIN	911	1040	1130	1120	2030	1370	1270	1040	734	754	1080	775
CFSM	.80	1.03	1.09	1.20	2.51	1.24	1.31	1.09	.71	1.00	1.76	.78
IN.	.93	1.15	1.26	1.38	2.61	1.42	1.46	1.26	.79	1.15	2.03	.87

CAL YR 1984 TOTAL 1003977 MEAN 2743 MAX 15400 MIN 911 CFSM 2.06 IN. 28.04
WTR YR 1985 TOTAL 584570 MEAN 1602 MAX 8250 MIN 734 CFSM 1.20 IN. 16.33

e Estimated

03453500 FRENCH BROAD RIVER AT MARSHALL, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-67, 1973 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1967, August 1973 to September 1978, March 1979 to September 1984.
WATER TEMPERATURES: October 1957 to September 1967, August 1973 to September 1978, March 1979 to September 1984.

INSTRUMENTATION.--Water-quality monitor from October 1980 to September 1984.

REMARKS.--Station operated as part of NASQAN network from March 1979 to present. Daily records of specific conductance for water years 1958-64 are available in files of district office in Raleigh, NC.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1965-67, 1974-78, 1979-84): Maximum, 265 microsiemens Oct. 18, 1981; minimum daily, 33 microsiemens May 31, 1976.
WATER TEMPERATURE (water years 1958-67, 1974-78, 1979-84): Maximum, 31.5°C July 5, 1982, July 26, 1984; minimum daily, 0.0°C on several days during the winter months of most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT 11...	1145	917	--	--	--	--	--	--	--	--	--	--
DEC 04...	1045	1680	90	7.4	5.5	5.5	728	12.0	100	250	6100	19
FEB 06...	1300	3060	80	7.1	4.5	15	734	12.5	100	2900	87000	18
MAY 22...	1000	1260	115	6.9	19.0	7.0	737	8.2	92	160	22000	19
SEP 16...	1145	1140	73	7.3	17.5	2.0	746	9.7	104	20	8500	16

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 04...	0	5.7	1.2	13	57	1	1.4	17	6.7	<.10	10	65
FEB 06...	2	4.9	1.3	8.1	47	.9	1.5	14	6.0	<.10	9.3	58
MAY 22...	0	5.6	1.3	13	57	1	1.6	17	6.3	<.10	11	72
SEP 16...	0	4.3	1.3	9.5	53	1	1.9	8.0	6.9	<.10	9.1	59

03453500 FRENCH BROAD RIVER AT MARSHALL, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--
DEC 04...	69	.09	295	.55	.270	.35	.50	.230	.130	.140	.43
FEB 06...	56	.08	479	.62	.140	.18	.70	.130	.070	.060	.18
MAY 22...	68	.10	245	.74	.200	.26	.50	.180	.110	.130	.40
SEP 16...	54	.08	182	.52	.160	.21	.50	.110	.140	.110	.34

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--
DEC 04...	10	<1	19	<.5	<1	<1	<3	2	130	3	<4
FEB 06...	90	<1	19	<.5	<1	<1	<3	1	130	2	<4
MAY 22...	50	<1	18	<.5	<1	3	<3	2	150	1	7
SEP 16...	30	<1	14	<.5	<1	2	<3	3	170	3	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 11...	--	--	--	--	--	--	--	--	--	13	32	68
DEC 04...	11	.1	<10	1	<1	<1	26	<6	10	18	82	76
FEB 06...	13	.2	<10	<1	<1	<1	26	<6	6	31	256	81
MAY 22...	8	<.1	<10	1	<1	<1	28	<6	9	21	71	90
SEP 16...	8	<.1	<10	1	<1	<1	25	<6	8	12	37	67

03453500 FRENCH BROAD RIVER AT MARSHALL, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/19	1400	WATER	0	1.31	1020	140	7.60	22.0	1.9	9.2	80
84/11/14	1400	WATER	0	1.55	1310	92	7.00	9.0	7.1	11.8	170
84/12/04	1045	WATER	0	1.81	1680						250
84/12/10	1510	WATER	0	1.77	1620	85	6.80	4.0	3.8	10.6	80
85/01/10	1400	WATER	0.1			115	7.20	4.0		12.9	10K
85/01/24	1330	WATER	0	1.60	1380	118	7.00	1.0	3.7	12.8	80
85/02/06	1100	WATER	0	2.58	3020						2900
85/02/26	1420	WATER	0	2.57	3000	74	6.90	13.0	34.0	9.8	4400
85/03/11	1145	WATER	0	1.76	1600	83	6.80	11.0	6.0	10.4	70
85/04/12	1230	WATER	0	1.62	1410	113	7.00	12.0	4.6	10.8	1500
85/05/03	1000	WATER	0	1.61	1400	130	7.20	17.0	5.0	8.6	110
85/05/22	1000	WATER		1.51	1260						160
85/06/07	1045	WATER	0	1.29	1000	130	7.10	24.0	7.8	7.3	760
85/07/26	1015	WATER	0	1.93	1850	99	7.10	22.5	23.0	7.6	16000
85/08/27	1050	WATER	0.1	2.29	2460	73	7.00	21.0	18.0	8.6	600
85/09/16	1145	WATER									20
85/09/18	1030	WATER	0.1	1.26	892	97	7.40	18.0	2.5	9.3	680

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/19	1400	WATER	0	29	10	140	.65	.100	.400	.270	.190
84/11/14	1400	WATER	0	20	12	93	.49	.210	.400	.180	.100
84/12/10	1510	WATER	0	17	7	53	.49	.260	.400	.120	.070
85/01/10	1400	WATER	0.1	25	9	86					
85/01/24	1330	WATER	0	31	15	110					
85/02/26	1420	WATER	0	17	64	130	.89	.140	.400	.200	.050
85/03/11	1145	WATER	0	20	14	92					
85/04/12	1230	WATER	0	25	16	110					
85/05/03	1000	WATER	0	25	22	110	.89	.130	.400	.630	.100
85/06/07	1045	WATER	0	23	18	120					
85/07/26	1015	WATER	0	20	120	250					
85/08/27	1050	WATER	0.1	14	53	120	.38	.130	.400	.220	.080
85/09/18	1030	WATER	0.1	23	14	91					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/14	1400	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/26	1420	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/03	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/27	1050	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03455500 WEST FORK PIGEON RIVER ABOVE LAKE LOGAN, NEAR HAZELWOOD, NC

LOCATION.--Lat 35°23'46", long 82°56'17", Haywood County, Hydrologic Unit 06010106, on right bank at upstream side of bridge on Secondary Road 1216, 600 ft upstream from Big Creek, 1.1 mi upstream from Lake Logan, 6.7 mi southeast of Hazelwood, and at mile 9.3.

DRAINAGE AREA.--27.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,976.00 ft above National Geodetic Vertical Datum of 1929 (Tennessee Valley Authority bench mark).

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--31 years, 104 ft³/s, 51.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s Feb. 13, 1966, gage height, 9.5 ft, from floodmarks; minimum, 9.4 ft³/s Sept. 29, 30, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	0600	*2,510	*5.16	Aug. 17	1315	2,310	4.99

Minimum discharge, 18 ft³/s Oct. 4, 5, gage height, 1.06 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	38	70	45	613	104	68	51	39	52	66	51
2	19	39	78	143	315	100	59	58	39	36	55	47
3	19	42	84	142	153	92	57	63	37	31	48	52
4	19	148	65	146	116	88	55	51	35	28	42	54
5	18	70	176	93	192	104	81	49	35	30	39	45
6	19	54	150	78	172	85	159	47	36	38	38	57
7	19	47	104	71	118	80	77	46	60	38	82	51
8	22	43	84	66	e94	78	70	76	55	29	52	49
9	23	41	75	62	e90	82	67	85	36	27	46	59
10	26	85	71	61	e92	74	64	92	33	26	39	49
11	21	115	66	60	180	71	62	80	33	29	36	42
12	19	57	61	53	253	71	60	84	46	26	55	40
13	20	49	58	e56	137	66	59	100	35	70	45	40
14	19	46	55	e56	116	65	61	118	32	37	36	39
15	19	43	53	e52	106	63	282	89	30	42	33	36
16	21	42	51	e55	e102	61	119	72	31	41	38	34
17	28	39	49	52	e88	61	95	71	31	31	815	33
18	23	39	48	e47	84	58	82	72	50	29	179	33
19	24	98	47	45	83	56	77	62	34	27	103	32
20	40	53	61	45	79	55	74	59	32	26	81	31
21	57	46	52	e45	79	60	70	57	29	25	72	30
22	146	42	83	e44	88	97	66	54	29	51	64	30
23	80	41	57	e44	127	83	64	56	34	54	59	30
24	65	40	55	e43	184	82	65	52	35	36	102	34
25	59	39	63	e43	218	72	63	50	32	99	138	30
26	41	38	54	e43	218	67	58	47	42	91	84	30
27	36	39	52	e43	140	65	58	45	28	59	73	32
28	72	497	49	e43	113	64	61	48	26	133	73	28
29	91	101	48	e45	---	61	55	46	29	92	70	27
30	50	80	47	e42	---	58	53	42	64	109	60	27
31	41	---	46	e112	---	73	---	41	---	105	55	---
TOTAL	1181	2151	2112	1975	4350	2296	2341	1963	1107	1547	2778	1172
MEAN	38.1	71.7	68.1	63.7	155	74.1	78.0	63.3	36.9	49.9	89.6	39.1
MAX	146	497	176	146	613	104	282	118	64	133	815	59
MIN	18	38	46	42	79	55	53	41	26	25	33	27
CFSM	1.38	2.60	2.47	2.31	5.62	2.68	2.83	2.29	1.34	1.81	3.25	1.42
IN.	1.59	2.90	2.85	2.66	5.86	3.09	3.16	2.65	1.49	2.09	3.74	1.58

CAL YR 1984	TOTAL	37332	MEAN	102	MAX	1140	MIN	18	CFSM 3.70	IN.	50.32
WTR YR 1985	TOTAL	24973	MEAN	68.4	MAX	815	MIN	18	CFSM 2.48	IN.	33.66

e Estimated

03455500 WEST FORK PIGEON RIVER ABOVE LAKE LOGAN NEAR HAZELWOOD, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
85/01/31	1600	WATER	0	1.73	132	15	6.40	.0		12.4	20
85/02/27	1520	WATER	0	1.72	129	13	6.40	10.0	2.0	9.7	20
85/03/27	1425	WATER	0	1.39	70	13	6.50	10.0		10.9	1
85/04/18	0815	WATER	0	1.51	84	16	6.00	9.0		10.7	860
85/05/02	1145	WATER	0	1.35	59	16	6.70	12.0	1.0	9.9	10
85/06/21	0830	WATER	0	1.15	30	14	6.40	12.0		9.1	10K
85/07/16	0830	WATER	0	1.27	41	21	6.40	16.5		8.5	60
85/08/14	0830	WATER	0.1	1.24	37	22	6.30	15.0	1.0K	8.6	10K
85/09/19	0900	WATER	0.1	1.18	32	14	6.40	11.0		10.4	10K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/31	1600	WATER	0	2	7	35					
85/02/27	1520	WATER	0	2	4	18	.23	.020	.100K	.010K	.010K
85/03/27	1425	WATER	0	3	1	33					
85/04/18	0815	WATER	0	2	3	23					
85/05/02	1145	WATER	0	4	1	19	.16	.020	.200	.100	.010K
85/06/21	0830	WATER	0	6	5	47					
85/07/16	0830	WATER	0	3	3	46					
85/08/14	0830	WATER	0.1	4	4	55	.13	.080	.200		.010K
85/09/19	0900	WATER	0.1	3	1	21					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/27	1520	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/02	1145	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/14	0830	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03456100 WEST FORK PIGEON RIVER AT BETHEL, NC

LOCATION.--Lat 35°27'48", long 82°54'00", Haywood County, Hydrologic Unit 06010106, on left bank 20 ft downstream from bridge on Secondary Road 1112, 0.6 mi southwest of Bethel, 1.6 mi upstream from confluence with East Fork Pigeon River, and 5.6 mi downstream from Lake Logan.

DRAINAGE AREA.--58.4 mi².

PERIOD OF RECORD.--January 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,667.78 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).

REMARKS.--Records fair. Considerable regulation at times caused by Lake Logan (station 03455773). Tennessee Valley Authority has a stage radio telemeter at station. Several measurements of water termperatures were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,300 ft³/s Feb. 2, 1983, gage height, 10.96 ft; minimum daily, 21 ft³/s Oct. 15, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,480 ft³/s Nov.11, gage height, 5.11 ft; minimum daily, 28 ft³/s Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	54	106	66	527	167	117	83	58	89	111	78
2	29	50	103	149	516	161	94	88	58	62	90	73
3	28	58	133	182	291	150	91	98	61	50	75	69
4	28	152	98	193	214	147	91	83	56	46	67	85
5	29	104	194	141	271	155	94	78	54	46	61	67
6	e29	76	221	118	276	138	251	75	52	47	57	66
7	e30	65	135	108	199	129	131	74	68	63	101	85
8	e38	60	126	99	163	125	119	108	101	47	84	66
9	e38	57	114	92	156	133	119	127	57	43	70	76
10	e39	65	106	90	151	119	113	133	51	42	60	78
11	40	195	99	89	239	115	108	119	50	44	55	63
12	39	87	92	76	474	111	103	107	61	42	56	58
13	39	74	87	77	263	106	101	143	53	73	80	58
14	39	69	83	77	218	103	104	146	47	57	56	56
15	37	67	79	68	189	100	330	135	46	52	51	52
16	49	63	76	71	171	97	198	107	44	65	51	50
17	50	58	74	81	161	96	162	107	44	47	835	48
18	46	59	71	72	151	91	143	106	70	42	262	47
19	45	117	69	68	148	89	133	93	53	41	157	50
20	41	81	84	63	141	88	126	87	48	52	128	55
21	49	66	79	150	137	92	119	84	45	47	110	55
22	79	61	107	325	142	143	112	82	44	49	98	55
23	108	59	84	e95	173	134	107	81	42	58	90	52
24	104	58	84	90	230	131	107	78	58	54	123	49
25	86	56	81	e82	263	117	104	77	47	117	187	47
26	63	54	78	e77	329	108	97	72	70	131	124	50
27	53	55	74	e74	215	105	94	67	47	88	113	51
28	64	503	71	e71	181	104	100	68	44	156	98	50
29	127	163	69	72	---	99	91	74	43	137	115	49
30	72	125	68	67	---	95	86	65	88	108	98	48
31	59	---	67	94	---	104	---	61	---	188	85	---
TOTAL	1608	2891	3012	3177	6597	3652	3753	2906	1660	2183	3748	1786
MEAN	51.9	96.4	97.2	102	236	118	125	93.7	55.3	70.4	121	59.5
MAX	127	503	221	325	527	167	330	146	101	188	835	85
MIN	28	50	67	63	137	88	86	61	42	41	51	47
(†)	+42	+3	-7	-240	+249	-2	-4	-1	+2	+3	-3	-84
MEAN‡	53.2	96.5	96.9	94.7	244	118	125	93.7	55.4	70.5	121	56.7
CFSM‡	0.91	1.65	1.66	1.62	4.18	2.02	2.14	1.60	0.95	1.21	2.07	0.97
IN.‡	1.05	1.84	1.91	1.87	4.36	2.32	2.39	1.85	1.06	1.39	2.38	1.08

CAL YR 1984 TOTAL 61470 MEAN 168 MAX 1460 MIN 26 MEAN‡ 168 CFSM‡ 2.88 IN.‡ 39.14
WTR YR 1985 TOTAL 36973 MEAN 101 MAX 835 MIN 28 MEAN‡ 101 CFSM‡ 1.73 IN.‡ 25.52

e Estimated
† Change in contents, in cfs-days, in Lake Logan.
‡ Adjusted for change in lake contents.

03456500 EAST FORK PIGEON RIVER NEAR CANTON, NC

LOCATION.--Lat 35°27'42", long 82°52'13", Haywood County, Hydrologic Unit 06010106, on right bank 800 ft upstream from bridge on U.S. Highway 276, 0.3 mi downstream from Dix Creek, 1.6 mi upstream from confluence with West Fork Pigeon River, and 5.2 mi southwest of Canton.

DRAINAGE AREA.--51.5 mi².

PERIOD OF RECORD.--March 1954 to current year.

REVISED RECORDS.--WDR NC-73-1: 1966(M), 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 2,674.34 ft above National Geodetic Vertical Datum of 1929 (Tennessee Valley Authority bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Tennessee Valley Authority has a stage radio telemeter at station. Several measurements of water temperatures were made during the year.

AVERAGE DISCHARGE.--31 years, 144 ft³/s, 37.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s May 28, 1973, gage height, 11.19 ft, from rating curve extended above 5,470 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 12 ft³/s Jan. 9, 1956 and Dec. 11, 1981, result of freezeup; minimum gage height, 0.81 ft Dec. 15, 1958, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	1500	*2,030	*4.60	No other peak greater than base discharge.			

Minimum discharge, 23 ft³/s Jan. 21, gage height, 1.04 ft, result of freezeup, minimum daily, 26 ft³/s July 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	36	96	49	373	140	98	83	54	71	78	62
2	32	35	90	88	319	134	83	84	52	51	65	59
3	30	38	102	139	216	125	80	90	51	41	57	56
4	29	116	81	163	165	122	78	79	49	37	51	60
5	29	74	142	121	179	124	81	76	48	36	47	54
6	29	55	176	102	178	114	189	73	48	36	44	52
7	29	48	124	93	140	110	115	71	55	40	52	53
8	32	45	111	85	119	109	107	88	71	34	53	52
9	37	43	100	79	e110	112	105	102	49	32	49	53
10	36	49	93	76	107	104	99	117	50	32	42	50
11	32	139	86	74	219	100	95	100	49	36	38	46
12	30	69	79	66	491	98	91	106	46	36	41	45
13	29	60	76	e64	274	93	89	138	43	48	49	46
14	29	57	71	e62	220	91	92	104	40	36	38	44
15	29	55	69	e59	188	89	322	104	39	32	35	42
16	30	52	67	e57	162	85	247	93	39	38	37	41
17	34	50	64	e55	145	83	205	96	37	31	699	37
18	35	48	62	e53	131	80	176	94	46	29	306	37
19	34	72	60	e52	124	78	158	85	40	28	184	35
20	34	57	63	51	116	76	146	80	39	26	135	35
21	55	51	61	51	111	78	135	78	37	27	111	34
22	72	49	66	e50	113	114	125	77	36	33	93	34
23	57	48	60	e50	124	114	118	74	36	43	83	34
24	51	46	57	e50	154	118	115	70	53	49	91	39
25	49	44	60	e49	168	109	109	70	38	87	118	35
26	40	43	56	e49	216	100	101	65	40	92	89	34
27	35	42	54	e49	165	98	98	63	36	53	85	37
28	46	387	53	e49	148	97	98	64	37	92	74	33
29	59	160	52	e48	---	94	91	66	39	89	81	31
30	43	114	51	e48	---	89	86	61	56	69	72	30
31	37	---	50	109	---	90	---	57	---	101	67	---
TOTAL	1181	2182	2432	2190	5175	3168	3732	2608	1353	1485	3064	1300
MEAN	38.1	72.7	78.5	70.6	185	102	124	84.1	45.1	47.9	98.8	43.3
MAX	72	387	176	163	491	140	322	138	71	101	699	62
MIN	29	35	50	48	107	76	78	57	36	26	35	30
CFSM	.74	1.41	1.52	1.37	3.59	1.98	2.41	1.63	.88	.93	1.92	.84
IN.	.85	1.58	1.76	1.58	3.74	2.29	2.70	1.88	.98	1.07	2.21	.94

CAL YR 1984 TOTAL 50851 MEAN 139 MAX 1150 MIN 29 CFSM 2.70 IN. 36.73
WTR YR 1985 TOTAL 29870 MEAN 81.8 MAX 699 MIN 26 CFSM 1.59 IN. 21.58

e Estimated

03456991 PIGEON RIVER NEAR CANTON, NC

LOCATION.--Lat 35°31'19", long 82°50'53", Haywood County, Hydrologic Unit 06010106, on right bank 600 ft upstream from NC Highway 215 bridge, 1.3 miles upstream from U.S. Highways 19 and 23 at Canton, and at mile 64.9.

DRAINAGE AREA.--130 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1907 to June 1909, October 1928 to current year. Monthly discharge only for some periods published in WSP 1306. Published as Pigeon River at Canton, NC (03457000) May 1907 to June 1909, October 1928 to September 1983.

REVISED RECORDS.--WSP 823: Drainage area. WSP 853: 1929-37(M). WSP 1306: 1903(M).

GAGE.--Water-stage recorder. Datum of gage is 2,581.66 ft above National Geodetic Vertical Datum of 1929 (Tennessee Valley Authority bench mark). Prior to June 1909, nonrecording gage at bridge 0.4 mi downstream at different datum. Dec. 6, 1928 to Jan. 3, 1929, nonrecording gage at present site and datum. Prior to Oct. 1, 1983 water-stage recorder at site 0.8 mile downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Occasional diurnal fluctuation and considerable regulation at low flow caused by Lake Logan on West Fork Pigeon River 11.2 mi upstream (station 03455773). Champion International Corporation has a telephone telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--58 years (1908, 1929-85), 322 ft³/s, 33.64 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft³/s Aug. 30, 1940, gage height, 20.75 ft, at former site, from floodmarks in gage well; minimum 15 ft³/s Jan. 8, 1956, gage height, 0.04 ft, at former site, result of freezeup; minimum daily, 27 ft³/s Sept. 7, 1954 at former site.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about 1810 is believed to have been approximately equal to that of Aug. 30, 1940, and flood of June 15, 1876, reached a stage of 18.3 ft, discharge, 25,700 ft³/s, at former site, from studies by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 28	0930	*3,230	*6.26				

Minimum discharge, 73 ft³/s Oct. 4, 5, gage height, 1.54 ft; minimum daily, 73 ft³/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	101	232	122	1030	290	195	176	132	183	212	149
2	79	93	212	236	986	285	152	181	127	132	170	141
3	76	105	275	349	560	253	147	207	133	105	143	132
4	74	282	205	405	401	244	144	179	123	94	128	154
5	73	227	341	299	459	255	147	168	119	91	117	129
6	78	151	493	238	406	227	438	161	116	93	110	121
7	79	126	296	216	352	211	229	157	130	116	149	147
8	83	117	273	192	282	204	207	196	218	93	158	137
9	90	110	245	176	268	216	199	252	129	85	131	135
10	92	121	228	168	254	194	187	203	118	83	113	139
11	85	401	212	164	464	185	177	248	122	91	104	118
12	82	182	194	142	1170	178	169	226	127	90	103	111
13	81	149	184	136	590	170	164	316	119	122	142	110
14	79	135	173	142	454	164	173	265	106	110	104	107
15	77	130	165	118	385	158	656	291	103	92	92	99
16	86	121	158	126	330	152	517	224	103	111	97	95
17	92	115	152	139	310	151	406	230	99	88	1310	92
18	92	113	148	124	280	145	350	228	135	79	614	90
19	87	204	141	115	271	138	318	203	117	76	355	89
20	82	163	155	105	257	138	295	189	102	82	273	94
21	110	129	151	120	244	139	275	183	96	80	229	93
22	146	119	181	258	244	222	250	176	92	89	200	93
23	203	116	157	216	285	230	220	160	92	103	181	90
24	194	113	143	168	385	224	230	144	124	108	203	91
25	152	109	146	157	415	202	229	160	97	202	338	88
26	122	106	134	165	575	179	214	155	123	244	224	86
27	100	107	135	166	380	172	207	148	95	151	210	92
28	107	1000	129	141	325	168	217	144	89	235	180	85
29	222	391	126	109	---	164	208	157	93	253	200	83
30	137	275	122	97	---	155	185	141	146	185	186	81
31	110	---	122	178	---	154	---	139	---	301	163	---
TOTAL	3258	5611	6028	5487	12442	5967	7497	6087	3526	3967	6931	3271
MEAN	105	187	194	177	444	192	250	196	118	128	224	109
MAX	222	1000	493	405	1170	290	656	316	218	301	1310	154
MIN	73	93	122	97	244	138	144	139	89	76	92	81
(†)	+42	+3	-7	-240	+249	-2	-4	-1	+2	+3	-3	-84
MEAN‡	106	187	194	169	453	192	250	196	118	128	223	106
CFSM‡	0.82	1.44	1.49	1.30	3.48	1.48	1.92	1.51	0.91	0.98	1.72	0.82
IN.‡	0.94	1.61	1.72	1.50	3.63	1.71	2.14	1.74	1.01	1.14	1.98	0.91

CAL YR 1984 TOTAL 117290 MEAN 320 MAX 2600 MIN 60 MEAN‡ 321 CFSM‡ 2.47 IN.‡ 33.55
WTR YR 1985 TOTAL 70072 MEAN 192 MAX 1310 MIN 73 MEAN‡ 192 CFSM‡ 1.48 IN.‡ 20.03

† Change in contents, in cfs-days, in Lake Logan.
‡ Adjusted for change in lake contents.

03456991 PIGEON RIVER NEAR CANTON, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/24	0830	WATER	0	2.00	213	24	6.40	16.0		8.4	1300
84/11/30	1530	WATER	0	2.11	255	14	6.40	5.0	1.0	12.4	80
84/12/11	1315	WATER	0	1.99	205	27	6.80	8.0		10.8	10
85/01/31	1520	WATER	0	2.00	190	29	6.60	3.0		11.8	3300
85/02/25	1330	WATER	0	2.44	403	24	6.50	9.0	1.0K	10.4	30
85/03/27	1340	WATER	0	1.99	186	26	7.00	10.0		11.8	10K
85/04/18	0915	WATER	0	2.29	318	25	6.60	11.5		10.3	170
85/05/02	1245	WATER	0	1.90	162	24	6.90	15.0	1.0	9.9	30
85/06/21	0915	WATER	0	1.65	92	28	7.10	17.0		8.5	160
85/07/16	0930	WATER	0	1.78	131	30	6.90	21.0		7.3	130
85/08/14	1010	WATER	0.1	1.67	107	23	6.70	20.0	1.0	8.0	80

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/24	0830	WATER	0	6	10	44					
84/11/30	1530	WATER	0	5	2	33	.22	.080	.200	.030	.010K
84/12/11	1315	WATER	0	5	1K	27					
85/01/31	1520	WATER	0	7	39	76					
85/02/25	1330	WATER	0	3	1	26	.26	.030	.200	.010	.010K
85/03/27	1340	WATER	0	6	1	46					
85/04/18	0915	WATER	0	6	6	36					
85/05/02	1245	WATER	0	7	3	31	.24	.040	.200	.350	.010K
85/06/21	0915	WATER	0	12	6	66					
85/07/16	0930	WATER	0	8	6	65					
85/08/14	1010	WATER	0.1	7	1	44	.20	.010	.200	.030	.010K

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/30	1530	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/25	1330	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/02	1245	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/14	1010	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03459500 PIGEON RIVER NEAR HEPCO, NC

LOCATION.--Lat 35°38'05", long 82°59'21", Haywood County, Hydrologic Unit 06010106, on left bank 95 ft east of Interstate Highway 40, 0.8 mi downstream from Jonathan Creek, 2.0 mi south of Hepco, 2.4 mi upstream from Fines Creek, and at mile 45.1.

DRAINAGE AREA.--350 mi².

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 823: Drainage area. WSP 893: 1928-31, 1932(M), 1933-36, 1937-39(M).

GAGE.--Water-stage recorder. Datum of gage is 2,335.95 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).

REMARKS.--No estimated daily discharges. Records good. Considerable regulation by Lake Junaluska on Richland Creek and Lake Logan on West Fork Pigeon River for periods at low flow, combined capacity of reservoirs, about 2,000 ft³/s-day (stations 03455773, 03458319). Tennessee Valley Authority has a stage radio telemeter at station. Several measurements of water temperatures were made during the year.

AVERAGE DISCHARGE.--58 years, 676 ft³/s, 26.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,700 ft³/s Aug. 30, 1940, gage height, 15.82 ft, from floodmark in gage house, from rating curve extended above 12,000 ft³/s on basis of slope-area measurements at gage heights 14.94 ft and 15.82 ft; minimum, 81 ft³/s Sept. 30, 1941; minimum gage height, 0.81 ft Sept. 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 1876 and February 1902 reached a stage of about 18 ft, from flood profiles by Tennessee Valley Authority, discharge, about 42,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 17	2000	*4,520	*6.17				

Minimum discharge, 161 ft³/s Oct. 14, July 21, Sept.30, gage height, 1.23 ft; minimum daily, 165 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	336	489	332	2780	731	521	380	304	363	468	292
2	190	304	446	493	2640	705	454	385	296	320	402	278
3	192	257	548	795	1540	666	438	448	298	238	319	264
4	199	307	449	920	1090	636	426	398	279	214	281	271
5	261	474	542	747	1100	684	429	371	269	206	253	260
6	255	286	924	605	1180	616	923	356	275	200	241	251
7	260	242	619	553	925	571	718	350	304	238	308	267
8	243	226	558	506	784	556	741	419	449	211	356	248
9	175	216	516	471	718	577	758	543	328	187	297	318
10	207	250	489	451	709	545	673	524	283	193	255	273
11	183	624	466	443	855	525	479	490	285	217	236	210
12	174	398	435	414	2360	517	386	455	330	241	235	216
13	169	350	416	370	1260	501	376	532	289	198	264	209
14	167	316	399	391	1010	487	381	474	255	253	236	205
15	167	305	383	372	883	476	771	528	243	269	200	193
16	169	272	371	331	790	461	868	440	239	300	203	189
17	193	275	360	415	758	457	650	497	232	218	1970	183
18	198	269	349	393	710	445	561	489	301	185	1290	177
19	252	463	337	365	717	432	557	430	285	173	670	173
20	235	440	371	338	707	428	569	396	246	168	524	173
21	252	333	384	233	677	426	543	385	230	173	456	176
22	292	305	471	382	669	555	516	393	220	281	387	176
23	404	292	437	402	697	588	494	390	224	340	347	175
24	461	283	381	370	777	592	494	379	239	294	351	183
25	419	275	419	365	895	574	491	373	241	355	523	177
26	379	270	396	342	1150	518	508	352	224	465	462	174
27	282	264	373	342	880	495	436	335	223	408	438	191
28	306	1460	362	370	784	486	452	330	243	404	376	178
29	444	798	351	343	---	482	421	354	250	581	367	167
30	365	559	342	328	---	461	389	331	265	440	389	165
31	322	---	337	603	---	463	---	325	---	534	327	---
TOTAL	8028	11449	13720	13785	30045	16656	16423	12852	8149	8867	13431	6442
MEAN	259	382	443	445	1073	537	547	415	272	286	433	215
MAX	461	1460	924	920	2780	731	923	543	449	581	1970	318
MIN	167	216	337	233	669	426	376	325	220	168	200	165

CAL YR 1984	TOTAL	262692	MEAN	718	MAX	7230	MIN	167
WTR YR 1985	TOTAL	159847	MEAN	438	MAX	2780	MIN	165

TENNESSEE RIVER BASIN

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC
(Hydrologic bench-mark station)

LOCATION.--Lat 35°40'02", long 83°04'22", Haywood County, Hydrologic Unit 06010106, in Great Smoky Mountains National Park, on left bank 20 ft downstream from bridge on State Highway 284, 500 ft upstream from Little Cataloochee Creek, 2 mi north of Cataloochee and 3.7 mi upstream from mouth.

DRAINAGE AREA.--49.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to September 1952, October 1962 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,456.88 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).

REMARKS.--Records good. Records for Class A evaporation station 2.4 mi upstream published in reports of National Climatic Center, NOAA, U.S. Department of Commerce.

AVERAGE DISCHARGE.--42 years, 110 ft^3/s, 30.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft^3/s Mar. 6, 1963, gage height, 8.08 ft; minimum, 9 ft^3/s Jan. 2, 1940, Dec. 17, 24, 1943, gage height, 1.87 ft, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1145	*1,670	*5.62	No other peak greater than base discharge.			

Minimum discharge, 26 ft^3/s Sept. 30, gage height, 2.08 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	33	56	58	1080	122	91	67	48	61	62	e58
2	39	33	54	91	687	125	85	68	50	47	56	e56
3	37	33	59	106	420	117	84	77	48	37	49	e54
4	36	36	50	134	290	112	81	66	45	36	46	e52
5	35	38	64	122	277	128	87	62	43	35	43	e52
6	35	37	82	108	258	108	129	60	44	39	43	e45
7	34	33	66	99	224	103	95	59	59	37	57	42
8	34	33	82	90	192	101	93	74	56	33	47	38
9	38	32	60	83	180	105	93	76	44	31	46	42
10	43	50	58	79	163	95	88	68	47	39	41	40
11	36	80	55	76	165	92	86	65	54	53	49	37
12	34	41	52	70	220	96	83	69	64	66	41	35
13	34	38	51	e79	169	88	81	78	46	47	45	34
14	34	35	48	e75	154	87	80	84	42	39	e50	33
15	34	35	48	e59	137	85	131	72	40	49	e50	32
16	34	42	47	e64	138	83	115	66	40	46	e90	31
17	35	35	45	e70	144	81	108	88	38	37	e80	31
18	34	34	44	59	113	79	101	88	57	34	e70	30
19	33	99	44	57	116	77	95	74	42	33	e60	30
20	34	55	55	e53	111	75	92	69	39	32	e50	29
21	38	45	51	e82	109	75	88	67	37	37	e70	29
22	46	41	101	e84	113	99	85	65	36	54	e60	29
23	51	40	69	e86	120	87	82	72	42	82	e40	28
24	52	39	67	e86	128	104	84	65	40	57	e50	31
25	40	38	80	e88	140	100	78	62	36	50	e70	28
26	36	37	70	e75	175	96	74	58	34	52	e68	29
27	34	37	69	e89	154	95	75	55	33	59	e64	32
28	41	154	66	e102	142	95	83	55	33	66	e64	28
29	49	73	64	e84	---	93	74	55	40	67	e62	27
30	37	61	62	e69	---	89	69	51	52	59	e60	26
31	34	---	60	e106	---	96	---	49	---	59	e58	---
TOTAL	1176	1417	1879	2583	6319	2988	2690	2084	1329	1473	1741	1088
MEAN	37.9	47.2	60.6	83.3	226	96.4	89.7	67.2	44.3	47.5	56.2	36.3
MAX	52	154	101	134	1080	128	131	88	64	82	90	58
MIN	33	32	44	53	109	75	69	49	33	31	40	26
CFSM	.77	.96	1.23	1.69	4.59	1.96	1.82	1.37	.90	.97	1.14	.74
IN.	.89	1.07	1.42	1.95	4.78	2.26	2.03	1.58	1.00	1.11	1.32	.82

CAL YR 1984 TOTAL 45150 MEAN 123 MAX 1300 MIN 32 CFSM 2.50 IN. 34.14
WTR YR 1985 TOTAL 26767 MEAN 73.3 MAX 1080 MIN 26 CFSM 1.49 IN. 20.24

e Estimated

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1973 to current year.
WATER TEMPERATURE: October 1962 to current year.

INSTRUMENTATION.--Temperature recorder since October 1962. Water-quality monitor since May 1974.

REMARKS.--Miscellaneous chemical data published for 1945 water year.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 43 microsiemens June 13, 1974; minimum, 7 microsiemens Feb. 28, 1983.
WATER TEMPERATURE: Maximum, 23.5°C Aug. 5, 1977; minimum, 0.0°C on several days during winter months of most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 24 microsiemens Oct. 25; minimum, 10 microsiemens Feb. 9, Mar. 29.
WATER TEMPERATURE: Maximum, 20.0°C July 17; minimum, 0.0°C Jan. 21-24.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV												
05...	1215	38	--	--	--	--	--	--	--	--	--	--
DEC												
03...	1045	59	15	6.5	6.5	.50	700	11.4	101	4	250	4
FEB												
04...	1100	280	12	6.1	4.0	1.0	708	12.3	101	<1	1300	3
MAY												
28...	1000	54	15	6.2	12.0	.50	714	10.2	101	--	--	4
SEP												
17...	1015	32	15	6.6	10.5	.20	724	10.9	103	2	8500	4

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV												
05...	--	--	--	--	--	--	--	--	--	--	--	--
DEC												
03...	0	1.0	.34	1.1	35	.3	.50	1.4	.70	<.10	7.2	7
FEB												
04...	0	.78	.22	.80	33	.2	.50	1.5	--	<.10	6.2	11
MAY												
28...	0	1.1	.33	1.2	36	.3	.50	1.6	.60	<.10	7.9	13
SEP												
17...	0	1.1	.32	1.1	33	.2	.60	1.4	.60	<.10	8.2	18

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
NOV 05...	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	15	.00	1.1	.17	<.010	--	1.0	<.010	<.010	<.010	--
FEB 04...	--	.02	8.3	.22	.110	.14	.40	.010	.010	.020	.06
MAY 28...	16	.02	1.9	.10	.070	.09	.70	<.010	<.010	<.010	--
SEP 17...	16	.02	1.6	.12	.060	.08	.10	.030	.030	<.010	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
NOV 05...	--	--	--	--	--	--	--	--	--	--	--
DEC 03...	--	--	--	--	--	--	--	--	--	--	--
FEB 04...	60	<1	9	<.5	<1	<1	<3	<1	12	2	15
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
SEP 17...	20	<1	10	<.5	<1	<1	<3	1	17	3	<4

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. FINER THAN .062 MM
NOV 05...	--	--	--	--	--	--	--	--	--	3	.31	55
DEC 03...	--	--	--	--	--	--	--	--	--	1	.16	50
FEB 04...	<1	<.1	<10	<1	<1	<1	7	<6	<3	2	1.5	63
MAY 28...	--	--	--	--	--	--	--	--	--	2	.29	60
SEP 17...	<1	.4	<10	<1	<1	<1	10	<6	11	2	.17	25

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18	17	17	22	17	21	18	11	16	20	18	19
2	17	16	17	22	17	21	18	12	14	19	18	18
3	17	15	16	21	17	20	19	16	18	18	15	16
4	18	16	17	21	17	18	18	16	17	18	15	16
5	18	16	17	17	17	17	18	12	16	17	15	16
6	18	17	17	17	16	17	18	13	16	15	12	14
7	18	17	17	16	14	15	15	15	15	16	12	14
8	18	16	17	16	14	15	16	11	14	16	12	14
9	18	12	16	17	15	16	16	12	14	16	14	15
10	19	14	16	17	15	16	14	12	12	17	16	16
11	18	13	17	17	14	16	19	13	14	17	15	16
12	17	16	16	16	13	14	19	13	16	18	14	15
13	17	16	16	16	14	15	20	14	15	16	13	15
14	17	16	17	16	15	16	20	15	17	15	14	15
15	18	12	17	16	14	15	20	15	17	15	13	14
16	18	17	18	16	15	16	20	15	18	15	14	15
17	20	13	18	16	15	16	20	16	18	17	15	16
18	20	19	19	16	14	15	20	16	18	18	16	17
19	20	19	19	17	14	16	21	17	18	18	16	17
20	20	19	20	17	14	16	18	15	16	18	14	16
21	21	16	20	16	15	16	17	16	17	17	11	16
22	22	17	19	15	14	15	17	15	16	16	12	14
23	22	17	20	15	14	15	18	16	17	15	14	15
24	23	18	19	15	14	15	17	14	16	13	12	13
25	24	18	20	15	12	14	17	14	16	15	13	14
26	23	18	22	15	12	14	17	14	16	14	14	14
27	22	17	20	20	13	18	16	16	16	14	14	14
28	21	19	20	20	15	19	16	15	16	15	14	15
29	20	19	19	19	18	18	18	16	17	15	14	15
30	22	17	20	17	12	16	18	15	16	16	15	15
31	22	17	21	---	---	---	18	15	16	17	12	16
MONTH	24	12	18	22	12	16	21	11	16	20	11	15

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	18	12	14	15	14	14	16	15	15	17	16	17
2	18	12	15	15	15	15	15	14	15	18	17	17
3	14	14	14	15	14	15	15	14	15	18	17	17
4	14	14	14	15	15	15	16	15	15	18	17	17
5	14	11	13	15	15	15	16	15	15	19	18	18
6	16	12	14	15	14	15	15	15	15	20	19	19
7	14	13	13	15	14	15	15	15	15	20	19	20
8	13	12	13	16	15	16	15	14	15	21	20	20
9	13	10	12	16	16	16	15	14	15	20	20	20
10	14	13	13	16	15	16	15	14	14	21	17	20
11	15	13	14	16	15	16	15	14	15	20	19	20
12	15	13	14	16	16	16	16	14	15	21	20	20
13	13	13	13	16	15	16	16	15	15	22	20	21
14	13	13	13	16	15	16	16	15	15	22	16	20
15	13	13	13	13	12	13	16	14	15	23	16	21
16	13	12	13	14	12	13	16	15	15	22	19	20
17	13	13	13	15	12	13	16	15	16	19	18	18
18	14	13	14	14	12	13	16	15	15	18	17	17
19	15	14	14	15	12	13	16	15	16	18	17	17
20	15	14	15	15	13	14	16	15	15	18	17	17
21	15	14	14	15	13	14	16	15	16	18	14	17
22	16	14	15	15	13	14	16	15	16	20	17	18
23	16	15	15	15	14	15	16	15	16	19	17	18
24	15	14	15	15	13	14	16	15	16	17	16	16
25	16	14	15	14	12	13	16	15	15	17	15	16
26	16	15	16	15	12	13	16	15	15	17	15	16
27	16	15	16	15	13	14	16	15	16	17	15	16
28	15	14	15	15	14	15	16	11	15	16	15	16
29	---	---	---	17	10	15	16	11	14	16	11	14
30	---	---	---	17	16	16	17	15	16	17	15	16
31	---	---	---	17	16	16	---	---	---	17	16	16
MONTH	18	10	14	17	10	15	17	11	15	23	11	18

TENNESSEE RIVER BASIN

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17	16	17	17	16	17	17	15	16	16	15	16
2	18	15	17	18	17	17	16	15	16	16	15	16
3	19	17	18	19	16	18	15	14	15	16	15	16
4	19	18	19	19	17	18	16	13	13	16	15	16
5	19	14	18	18	15	17	17	15	16	16	15	16
6	19	17	18	17	16	16	17	13	16	16	15	16
7	18	12	16	17	16	16	17	13	16	17	13	15
8	19	16	17	17	16	16	18	17	17	17	16	16
9	19	16	18	18	17	18	18	13	16	18	16	17
10	20	18	18	18	17	18	18	17	17	18	17	17
11	19	14	18	19	17	18	18	14	17	18	17	17
12	18	11	16	19	16	18	18	14	17	18	17	17
13	16	15	15	18	17	18	19	15	18	17	15	16
14	16	14	15	18	17	18	19	17	18	16	14	14
15	18	15	16	18	17	18	17	17	17	15	14	14
16	18	17	17	19	18	19	19	17	17	15	14	15
17	18	16	17	19	18	19	18	17	17	16	15	15
18	18	17	18	19	18	19	18	17	17	16	15	16
19	18	17	17	19	18	19	17	16	17	16	16	16
20	17	13	14	19	18	19	17	16	17	17	16	16
21	14	13	13	21	18	20	17	16	16	16	15	16
22	15	13	14	22	18	20	16	14	15	17	15	16
23	17	15	15	20	15	18	16	13	15	17	15	16
24	18	15	16	19	18	19	16	16	16	18	17	18
25	18	15	16	19	14	16	16	15	16	17	14	16
26	18	15	16	19	16	18	17	15	16	18	16	17
27	18	16	16	20	14	17	17	16	16	18	16	17
28	18	15	16	19	13	16	16	16	16	17	15	16
29	18	16	17	20	16	18	16	16	16	17	15	16
30	19	16	18	20	16	18	16	16	16	18	16	17
31	---	---	---	18	15	16	16	16	16	---	---	---
MONTH	20	11	17	22	13	18	19	13	16	18	13	16
YEAR	24	10	16									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.5	10.0	10.5	14.0	11.5	13.0	5.0	3.5	4.5	11.5	10.5	11.0
2	10.5	9.0	9.5	13.5	12.0	13.0	6.0	3.0	4.5	11.0	9.0	10.0
3	10.0	7.5	9.0	13.0	11.0	12.0	7.5	5.0	6.5	9.0	8.0	8.5
4	11.5	8.5	10.0	13.0	12.0	12.5	5.0	3.0	3.5	8.5	6.0	7.5
5	12.5	10.5	11.5	12.5	10.5	12.0	5.5	3.5	4.5	6.0	2.5	4.0
6	13.0	11.0	12.0	10.5	7.0	9.0	5.0	1.0	4.0	4.0	1.5	2.5
7	13.0	11.5	12.5	7.5	5.0	6.5	1.0	.5	.5	4.5	2.5	3.5
8	13.5	12.5	13.0	7.5	5.0	6.0	1.5	.5	.5	3.5	2.0	3.0
9	14.0	12.5	13.5	8.5	6.0	7.5	2.5	1.0	2.0	3.0	1.5	2.5
10	14.5	13.0	13.5	9.0	6.5	8.0	5.0	2.5	3.5	4.5	2.5	3.5
11	14.5	12.5	13.5	9.0	7.0	8.0	6.5	4.5	5.5	4.5	2.0	4.0
12	14.0	11.5	13.0	7.0	4.5	6.0	6.5	3.5	5.0	2.0	.5	.5
13	13.5	11.0	12.5	4.5	2.5	4.0	8.5	6.5	7.0	.5	.5	.5
14	14.0	11.0	12.5	4.5	2.0	3.0	8.0	6.0	7.0	.5	.5	.5
15	14.0	11.5	13.0	6.5	3.0	5.0	8.0	6.0	7.0	.5	.5	.5
16	15.0	12.0	13.5	7.5	5.5	7.0	8.0	6.0	7.0	.5	.5	.5
17	15.0	13.0	14.0	5.0	2.5	4.0	9.0	7.0	8.0	1.0	.5	.5
18	16.0	13.5	15.0	7.0	3.5	5.0	9.5	7.5	8.5	2.5	1.0	1.5
19	16.5	14.0	15.0	9.0	7.0	8.5	10.5	8.5	9.5	2.5	1.5	2.0
20	16.5	14.5	15.5	7.5	4.5	6.0	10.5	9.5	10.0	2.0	.5	.5
21	16.0	15.0	15.5	4.5	2.5	3.5	10.5	9.5	10.0	.5	.0	.5
22	15.5	15.0	15.0	2.5	1.0	2.0	10.5	7.5	9.5	.0	.0	.0
23	15.0	14.0	14.5	3.0	1.0	2.0	7.5	5.5	6.5	.0	.0	.0
24	16.0	14.5	15.0	3.0	1.0	2.0	7.5	4.5	5.5	.5	.0	.0
25	16.0	14.5	15.5	4.0	1.5	2.5	8.0	6.5	7.5	.5	.5	.5
26	15.5	13.5	14.5	4.5	2.5	3.5	7.0	4.5	6.0	.5	.5	.5
27	14.5	12.0	13.5	8.5	4.5	6.5	9.0	7.0	7.5	.5	.5	.5
28	15.0	14.0	14.5	9.0	5.5	8.0	8.5	7.5	8.0	.5	.5	.5
29	16.0	14.5	15.0	5.5	3.0	4.0	9.5	7.5	8.5	.5	.5	.5
30	16.0	14.0	15.0	5.0	2.5	3.5	10.0	8.0	9.0	.5	.5	.5
31	15.0	12.5	14.0	---	---	---	11.5	10.0	10.5	.5	.5	.5
MONTH	16.5	7.5	13.5	14.0	1.0	6.5	11.5	.5	6.5	11.5	.0	2.5

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	.5	3.5	6.5	4.0	5.5	10.5	7.5	9.0	13.5	11.5	13.0
2	7.0	5.0	6.0	7.5	6.5	6.5	9.0	6.0	7.5	13.5	12.0	13.0
3	5.0	3.5	4.5	7.5	4.5	6.0	9.0	4.5	7.0	14.0	12.0	13.0
4	5.5	4.0	4.5	9.0	6.0	7.5	12.0	6.5	9.0	13.5	9.0	11.5
5	6.5	4.0	5.5	9.0	7.0	8.5	12.0	9.0	10.5	14.0	10.0	12.0
6	6.0	4.5	5.5	7.0	4.0	6.0	11.0	8.0	9.5	14.0	10.5	12.0
7	4.5	2.0	3.0	7.5	3.5	5.5	8.5	6.5	7.5	13.0	11.5	12.5
8	1.5	.5	.5	8.5	5.5	7.0	8.0	5.5	6.5	12.5	11.5	12.0
9	1.5	.5	.5	9.0	7.5	8.5	7.5	4.0	5.5	11.0	10.5	11.0
10	3.5	1.0	2.0	8.0	5.5	7.0	8.0	2.5	5.5	12.0	10.5	11.5
11	4.0	2.5	3.0	9.5	7.0	8.0	9.5	5.0	7.5	13.5	11.0	12.5
12	3.5	1.0	2.0	10.0	7.5	9.0	10.0	7.0	8.5	14.5	12.0	13.5
13	2.0	1.0	1.5	9.0	5.0	7.0	10.5	8.5	9.5	15.5	12.5	13.5
14	2.0	.5	1.0	8.5	7.5	8.0	13.0	9.0	11.0	15.0	12.5	14.0
15	1.5	.5	1.0	8.0	5.5	7.0	11.0	10.0	10.5	16.5	13.0	14.5
16	.5	.5	.5	7.5	4.0	6.0	11.5	9.5	10.5	15.5	13.0	14.0
17	2.5	.5	1.5	8.5	5.5	7.0	14.0	9.5	11.5	13.5	11.5	12.5
18	3.5	1.5	2.5	5.5	3.0	4.5	14.5	9.5	12.0	13.0	10.5	11.5
19	4.5	3.0	3.5	6.5	1.5	4.0	14.5	10.5	12.5	13.0	9.0	11.0
20	5.5	3.5	4.0	7.5	3.0	5.5	14.5	10.5	12.5	13.5	10.5	12.0
21	6.0	2.5	4.0	7.0	5.5	6.5	15.5	10.5	13.0	14.5	12.0	13.0
22	7.0	4.0	5.5	6.0	5.5	6.0	16.0	10.5	13.0	15.5	12.5	14.0
23	8.0	5.0	6.5	7.5	6.0	6.5	15.0	11.0	13.0	14.5	13.0	14.0
24	9.0	7.0	7.5	8.0	6.0	7.0	14.0	12.0	13.0	13.0	12.0	12.5
25	8.0	7.5	7.5	7.0	4.5	5.5	15.0	11.0	13.0	14.5	11.5	13.0
26	9.0	7.5	8.0	8.0	3.0	5.5	15.0	9.5	12.5	14.0	10.5	12.5
27	8.5	6.5	7.5	9.0	5.0	7.0	14.0	12.0	13.0	15.0	11.5	13.0
28	6.5	3.5	5.5	10.0	8.0	9.0	15.5	13.0	14.0	13.5	12.0	12.5
29	---	---	---	13.0	9.5	11.0	17.0	13.0	14.5	14.5	12.5	13.5
30	---	---	---	14.5	10.5	12.5	15.5	10.5	13.0	16.5	12.5	14.5
31	---	---	---	12.5	10.0	11.5	---	---	---	18.0	14.5	16.0
MONTH	9.0	.5	4.0	14.5	1.5	7.0	17.0	2.5	10.5	18.0	9.0	13.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.5	15.5	17.0	17.0	15.0	15.5	18.0	16.5	17.0	18.0	15.5	16.5
2	16.5	14.5	15.5	17.0	14.5	15.5	18.0	17.0	17.5	17.5	15.5	16.5
3	18.0	15.0	16.5	16.5	14.0	15.5	17.5	15.5	16.5	17.5	15.0	16.5
4	18.5	16.0	17.0	17.0	14.5	16.0	17.0	15.0	16.0	18.0	15.5	17.0
5	18.5	16.0	17.5	17.0	15.0	16.0	16.0	14.0	15.0	19.0	16.5	17.5
6	19.5	16.5	17.5	16.5	15.5	16.0	16.5	15.0	15.5	18.0	16.5	17.5
7	18.0	16.0	17.0	18.0	15.0	16.5	17.0	15.5	16.5	18.5	16.5	17.5
8	17.5	15.0	16.0	18.0	14.5	16.5	18.5	16.0	17.0	19.0	16.5	18.0
9	18.5	14.5	16.5	18.0	15.5	17.0	18.5	16.5	17.5	18.5	16.5	17.5
10	17.5	15.5	16.5	18.5	16.5	17.5	19.0	16.5	17.5	19.0	17.0	17.5
11	17.0	16.0	16.5	19.0	16.0	17.0	18.5	16.5	17.5	19.0	17.0	17.5
12	17.5	15.5	16.5	18.0	16.0	17.0	18.5	16.0	17.5	18.0	16.5	17.0
13	15.5	13.0	14.0	18.5	16.0	17.0	19.0	17.0	17.5	16.5	14.0	15.5
14	14.0	11.0	12.5	19.0	16.5	17.5	18.5	16.5	17.5	14.0	11.5	13.0
15	15.0	11.5	13.5	18.5	16.5	17.5	19.5	16.5	17.5	13.0	10.0	12.0
16	17.0	14.0	15.5	19.0	17.0	18.0	18.5	17.0	17.5	13.0	10.0	11.5
17	17.0	14.0	15.5	20.0	17.0	18.0	17.5	16.0	17.0	13.5	10.0	11.5
18	17.0	15.0	16.0	19.5	17.0	18.0	17.0	16.0	16.5	13.5	10.5	12.0
19	16.0	14.5	15.0	19.0	17.0	18.0	17.5	15.0	16.5	14.0	11.0	12.5
20	15.5	12.5	14.0	19.5	17.0	18.0	17.5	16.0	16.5	13.5	10.5	12.0
21	15.5	12.0	14.0	18.5	17.0	18.0	18.0	16.0	16.5	14.5	11.5	13.0
22	15.5	12.5	14.0	18.5	17.5	18.0	17.0	15.0	16.0	15.0	13.0	14.0
23	17.0	14.5	16.0	18.0	17.0	17.5	15.5	14.5	15.0	15.0	13.0	14.0
24	17.5	15.0	16.5	17.5	17.0	17.0	16.5	15.5	16.0	16.5	14.5	15.0
25	18.0	14.5	16.5	18.0	16.5	17.0	16.5	15.5	16.0	15.0	12.0	13.5
26	19.0	15.5	17.0	18.0	16.5	17.5	17.0	15.5	16.0	15.5	13.0	14.0
27	19.0	16.0	17.5	17.5	17.0	17.5	17.5	16.0	16.5	14.0	11.5	13.0
28	17.0	15.0	16.0	17.0	16.5	17.0	17.5	16.0	16.5	12.0	9.0	10.5
29	17.5	15.5	16.5	18.0	16.0	17.0	18.0	15.5	16.5	12.0	9.5	11.0
30	16.5	15.5	16.0	18.5	16.5	17.5	18.0	16.0	17.0	13.0	10.0	11.5
31	---	---	---	18.0	17.0	17.5	18.0	15.5	16.5	---	---	---
MONTH	19.5	11.0	16.0	20.0	14.0	17.0	19.5	14.0	16.5	19.0	9.0	14.5
YEAR	20.0	.0	10.5									

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/17	0955	WATER	0	2.16	34				.3		10
84/10/24	1130	WATER	0	2.27	49	18	6.50	15.0	1.0K	9.3	20
84/11/29	1420	WATER	0	2.41	73	14	6.60	4.0	1.0K	12.6	10K
84/12/03	1045	WATER	0	2.33	56						4
84/12/11	1125	WATER	0	2.32	57	14	6.70	5.0	1.0K	11.6	1K
85/01/25	1145	WATER	0	2.55	61	15	6.90	.0		12.9	1
85/02/04	1200	WATER	0	3.22	282			4.0			1K
85/02/25	1145	WATER	0	2.71	144	13	6.60	8.0	1.0K	10.6	25
85/03/27	1210	WATER	0	2.52	96	20	6.70	7.0	1.0K	12.0	1K
85/04/18	1345	WATER	0	2.56	105	22	6.80	13.5		10.2	10K
85/05/21	1315	WATER	0	2.40	71	15	6.30	14.0	1.0K	9.7	10K
85/05/28	1000	WATER		2.31	55						6
85/06/21	1330	WATER	0	2.19	37	19	6.60	15.0		8.7	10
85/07/16	1400	WATER	0	2.23	42	25	7.00	18.5		8.2	10
85/08/14	1430	WATER	0.1	2.24	45	21	6.70	18.0	3.6	8.4	20
85/09/17	1015	WATER									2
85/09/19	1400	WATER	0.1	2.12	31	22	6.70	14.0		9.3	15

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/17	0955	WATER	0		1K	24	.01K	.010	.010K	.010	.010
84/10/24	1130	WATER	0	5	1K	40	.01K	.060	.400	.010	.010
84/11/29	1420	WATER	0	2	1K	24	.23	.010	.200	.020	.010K
84/12/11	1125	WATER	0	4	1	32	.18	.030	.100	.010	.010K
85/01/25	1145	WATER	0	4	1K	29	.26	.010	.200	.010K	.010K
85/02/25	1145	WATER	0	4	2	25	.22	.020	.100K	.010	.010K
85/03/27	1210	WATER	0	4	1K	33	.15	.020	.100K	.020	.010K
85/04/18	1345	WATER	0	6	3	32	.14	.040	.200	.020	.010
85/05/21	1315	WATER	0	5	1	29	.18	.010	.100	.020	.010
85/06/21	1330	WATER	0	7	3	43	.19	.010	.100	.020	.010
85/07/16	1400	WATER	0	7	6	46	.13	.020	.200	.030	.010
85/08/14	1430	WATER	0.1	5	5	48	.14	.010	.200	.040	.010
85/09/19	1400	WATER	0.1	5	2	22	.14	.010	.200	.020	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/10/17	0955	WATER	0	10K	2K	5K	2K	10K	.2K	10K	2K
84/11/29	1420	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/25	1145	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/21	1315	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/14	1430	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03463300 SOUTH TOE RIVER NEAR CELO, NC

LOCATION.--Lat 35°49'53", long 82°11'04", Yancey County, Hydrologic Unit 06010108, on right bank on Secondary Road 1168, 800 ft upstream from bridge on Secondary Road 1167, 0.3 mi downstream from Whiteoak Creek, 1.9 mi southeast of Celo, and at mile 20.1.

DRAINAGE AREA.--43.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1957 to current year.

REVISED RECORDS.--WSP 1910: 1958-59. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,658 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--28 years, 148 ft^3/s, 46.42 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,900 ft^3/s Nov. 6, 1977, gage height, 17.41 ft, from outside floodmarks, from rating curve extended above 4,500 ft^3/s on basis of slope-area measurement of peak flow; minimum, 14 ft^3/s Dec. 26, 1958, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 17	1615	*2,640	*3.98				

Minimum discharge, 21 ft^3/s Oct. 5, 6, gage height, 0.56 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	30	95	42	414	136	119	80	66	154	170	85
2	26	29	84	111	310	125	88	80	107	164	151	79
3	23	29	89	259	173	114	81	81	131	91	128	74
4	22	129	74	290	126	110	77	74	86	79	113	71
5	22	84	115	179	137	133	81	70	74	77	100	67
6	22	56	161	130	162	107	191	67	68	67	92	64
7	25	42	128	111	121	95	109	65	81	66	101	60
8	27	36	95	96	e118	93	96	67	94	57	100	70
9	27	33	86	86	e110	153	90	67	69	51	102	83
10	26	44	81	81	101	104	84	70	113	48	86	64
11	25	178	76	77	116	93	81	78	115	45	78	58
12	23	64	70	72	270	104	77	231	93	43	124	57
13	23	48	67	e70	138	92	75	115	80	66	124	57
14	22	40	62	e68	133	88	85	118	71	60	92	54
15	23	38	60	e66	107	81	828	136	64	49	78	51
16	23	37	57	e64	107	76	421	299	60	52	94	49
17	23	35	55	62	90	73	253	215	56	64	1050	47
18	23	35	53	e58	84	68	199	203	55	50	499	45
19	23	48	51	54	90	65	169	149	50	45	267	43
20	29	44	56	46	88	64	148	126	47	42	204	42
21	46	39	57	e45	87	62	132	113	45	47	168	41
22	50	36	69	e44	99	105	119	103	44	50	142	41
23	47	35	59	e43	120	116	111	98	43	59	128	40
24	60	34	53	e42	186	140	134	99	41	218	121	49
25	57	33	56	e41	237	119	124	93	40	634	124	41
26	38	32	51	e44	287	102	105	84	37	290	113	42
27	32	32	49	e46	210	98	99	79	35	280	110	44
28	42	651	47	53	159	107	98	76	36	214	108	39
29	53	175	45	49	---	108	91	73	39	231	97	38
30	38	116	43	45	---	95	84	76	167	208	102	37
31	33	---	42	67	---	110	---	72	---	202	91	---
TOTAL	986	2262	2186	2541	4380	3136	4449	3357	2107	3803	5057	1632
MEAN	31.8	75.4	70.5	82.0	156	101	148	108	70.2	123	163	54.4
MAX	60	651	161	290	414	153	828	299	167	634	1050	85
MIN	22	29	42	41	84	62	75	65	35	42	78	37
CFSM	.73	1.74	1.63	1.89	3.60	2.33	3.42	2.49	1.62	2.84	3.76	1.26
IN.	.85	1.94	1.88	2.18	3.76	2.69	3.82	2.88	1.81	3.27	4.34	1.40

CAL YR 1984 TOTAL 46890 MEAN 128 MAX 1820 MIN 20 CFSM 2.96 IN. 40.28
WTR YR 1985 TOTAL 35896 MEAN 98.3 MAX 1050 MIN 22 CFSM 2.27 IN. 30.84

e Estimated

03463300 SOUTH TOE RIVER NEAR CELO, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/29	0930	WATER	0	.78	57	17	6.70	17.0		8.6	220
84/11/08	0955	WATER	0	.69	35	14	6.40	5.0	.4	11.4	10K
84/12/14	1110	WATER	0	.82	66	14	6.40	5.0		11.5	10K
85/01/24	1000	WATER	0	.79	56	15	7.10	.0		12.4	10K
85/02/26	1000	WATER	0	1.44	275	14	6.30	7.0	8.0	10.6	20
85/03/29	1000	WATER	0	1.02	108	15	6.40	12.0		10.4	10K
85/04/24	1115	WATER	0	1.01	105	19	6.60	13.0		9.7	10K
85/05/30	1115	WATER	0	.92	80	14	6.50	15.0	1.0K	8.5	60
85/06/26	1045	WATER	0	.72	38	21	6.80	18.0	1.0	8.8	30
85/07/29	1400	WATER	0	1.34	237	13	6.50	17.0	1.0K	9.2	50
85/08/15	1345	WATER	0.1	.89	80	14	6.60	19.0	1.0K	8.4	20
85/09/24	1330	WATER	0.1	.79	61	20	6.80	19.0	1.0	8.9	230

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/29	0930	WATER	0	4	1K	24					
84/11/08	0955	WATER	0	3	1	31	.05	.060	.200	.020	.010K
84/12/14	1110	WATER	0	4	1K	29					
85/01/24	1000	WATER	0	5	4	21					
85/02/26	1000	WATER	0	2	2	18	.22	.010	.200	.010	.010K
85/03/29	1000	WATER	0	3	1	24					
85/04/24	1115	WATER	0	5	1K	24					
85/05/30	1115	WATER	0	6	1	25	.08	.010	.200	.010	.010K
85/06/26	1045	WATER	0	6	2	22					
85/07/29	1400	WATER	0	6	2	61					
85/08/15	1345	WATER	0.1	4	4	48	.07	.030	.200	.010	.010K
85/09/24	1330	WATER	0.1	5	3	17					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/08	0955	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/26	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/30	1115	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/15	1345	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03479000 WATAUGA RIVER NEAR SUGAR GROVE, NC

LOCATION.--Lat 36°14'18", long 81°49'22", Watauga County, Hydrologic Unit 06010103, on right bank 250 ft upstream from bridge on Secondary Road 1121, 300 ft downstream from Cove Creek, 2.3 mi southwest of Sugar Grove, and at mile 64.4.

DRAINAGE AREA.--92.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,687.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Slight diurnal fluctuation at low flow caused by small mills above station. Tennessee Valley Authority has a stage radio telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--46 years, 177 ft^3/s, 26.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,000 ft^3/s Aug. 13, 1940, gage height, 29.6 ft, from profile based on floodmarks, from rating curve extended above 4,900 ft^3/s on basis of slope-area measurement of peak flow; minimum, 6.5 ft^3/s Jan. 1, 1954, gage height, 1.13 ft, result of freezeup; minimum daily, 13 ft^3/s Sept. 19, 30, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 22.1 ft from floodmarks on barn 0.25 mi above station as witnessed by local resident, discharge, 28,000 ft^3/s, from rating curve extended above 4,900 ft^3/s on basis of slope-area measurement at gage height 29.6 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 28	1100	*3,350	*7.90	Feb. 1	0645	2,260	6.56

Minimum discharge, 28 ft^3/s Oct. 12, gage height, 1.35.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	50	123	60	1010	210	129	88	66	66	122	76
2	40	50	103	83	559	190	108	90	88	71	145	70
3	35	44	101	163	350	167	104	100	93	60	97	65
4	33	59	88	254	223	154	97	84	75	57	75	61
5	31	68	90	213	201	148	94	79	73	61	66	59
6	51	55	112	150	213	134	199	75	102	52	61	69
7	64	48	205	128	174	124	142	76	119	50	64	60
8	64	45	146	111	220	123	129	72	108	44	74	64
9	58	41	116	97	277	132	126	71	85	41	81	59
10	47	46	85	91	166	116	117	72	97	40	63	51
11	33	195	88	90	144	114	111	70	143	46	55	48
12	30	86	81	104	525	114	106	100	107	37	49	45
13	31	77	77	108	1180	106	102	101	89	44	45	46
14	30	82	74	113	967	104	101	103	78	54	44	43
15	30	50	72	89	330	100	265	86	73	61	42	41
16	31	46	71	117	167	96	379	109	74	60	88	40
17	30	42	69	79	137	95	231	103	69	42	629	39
18	31	40	68	81	128	90	181	114	69	37	550	38
19	34	57	67	72	131	86	156	90	64	35	225	37
20	31	51	69	126	152	85	130	79	60	34	144	36
21	43	43	69	e82	170	83	125	77	57	31	120	37
22	41	40	73	e79	207	148	113	75	54	33	94	37
23	47	40	68	e77	258	172	106	102	53	31	82	37
24	44	39	65	e74	283	153	117	111	50	34	76	43
25	49	39	71	e66	298	137	121	e100	48	101	83	40
26	52	38	64	e66	356	120	100	e94	45	124	111	39
27	50	38	63	e65	284	112	98	e80	44	121	226	49
28	57	945	63	e63	237	110	128	e74	41	e106	186	41
29	86	266	61	e67	---	108	106	73	47	89	118	38
30	58	163	61	e94	---	104	92	70	65	129	99	39
31	52	---	61	e160	---	116	---	70	---	99	88	---
TOTAL	1378	2883	2624	3222	9347	3851	4101	2694	2236	1878	4002	1447
MEAN	44.5	96.1	84.6	104	334	124	137	86.9	74.5	60.6	129	48.2
MAX	86	945	205	254	1180	210	379	114	143	129	629	76
MIN	30	38	61	60	128	83	92	70	41	31	42	36
CFSM	.48	1.04	.92	1.13	3.63	1.35	1.49	.94	.81	.66	1.40	.52
IN.	.56	1.16	1.06	1.30	3.78	1.56	1.66	1.09	.90	.76	1.62	.58

CAL YR 1984 TOTAL 65909 MEAN 180 MAX 2950 MIN 30 CFSM 1.95 IN. 26.62
WTR YR 1985 TOTAL 39663 MEAN 109 MAX 1180 MIN 30 CFSM 1.18 IN. 16.02

e Estimated

03479000 WATAUGA RIVER NEAR SUGAR GROVE, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/16	1250	WATER	0	1.37	34	68	7.60	18.0	2.0	10.0	40
84/11/30	1300	WATER	0	2.05	154	68	6.80	7.0	2.8	12.5	80
84/12/20	1300	WATER	0	1.58	58	65	7.10	10.0	1.0	11.6	100
85/01/08	1320	WATER	0	1.85	96	57	6.80	1.0	1.0K	12.1	70
85/02/06	1350	WATER	0	2.24	180	77	6.80	5.0	3.1	11.6	400
85/03/22	1350	WATER	0	2.02	158	69	6.90	6.0	3.0	13.2	1300
85/04/23	1315	WATER	0	1.84	116	42	7.80	17.5	1.5	10.4	60
85/05/14	1035	WATER	0.1			86	7.00	22.2		9.5	
85/05/14	1315	WATER	0	1.70	78	71	8.30	16.0	3.6	10.2	190
85/06/04	1330	WATER	0	1.60	75	54	7.80	23.0		8.7	450
85/07/09	1400	WATER	0	1.45	47	63	8.30	24.0	5.2	9.2	100
85/08/08	1430	WATER	0	1.60	75	61	7.70	22.0	3.0	9.1	210
85/09/12	1345	WATER	0.1	1.55	47	59	7.60	19.0	2.0	8.4	170

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/16	1250	WATER	0	26	8	59	.17	.050	.400	.030	.010K
84/11/30	1300	WATER	0	17	7	67	1.40	.020	.300	.030	.010K
84/12/20	1300	WATER	0	19	4	60	.71	.040	.100	.020	.010
85/01/08	1320	WATER	0	17	3	64	1.20	.020	.200	.020	.010K
85/02/06	1350	WATER	0	15	8	82	1.00	.030	.200	.020	.010
85/03/22	1350	WATER	0	17	6	82					
85/04/23	1315	WATER	0	15	8	41					
85/05/14	1035	WATER	0.1				.34	.010	.200	.030	
85/05/14	1315	WATER	0	19	11	49	.33	.020	.300	.040	.010K
85/06/04	1330	WATER	0	17	21	75					
85/07/09	1400	WATER	0	21	10	60					
85/08/08	1430	WATER	0	19	8	72	.32	.030	.200	.030	.010
85/09/12	1345	WATER	0.1	21	6	52					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/30	1300	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/06	1350	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/14	1035	WATER	0.1		20K	50K	20K	100K	.2K	100K	20K
85/05/14	1315	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/08	1430	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, NC

LOCATION.--Lat 35°08'59", long 83°22'47", Macon County, Hydrologic Unit 06010202, on left bank 600 ft upstream from Owenby Branch, 0.5 mi upstream from Cartoogechaye Creek, 2 mi north of Prentiss, and at mile 119.5.

DRAINAGE AREA.--140 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 1236: 1949(M).

GAGE.--Water-stage recorder. Datum of gage is 2,008.39 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Since Oct. 1, 1954, auxiliary water-stage recorder 0.5 mi downstream from base gage at same datum.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--42 years, 393 ft³/s, 38.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s Oct. 4, 1964, gage height, 17.30 ft; minimum, 65 ft³/s Oct. 16, 17, 1954, gage height, 1.21 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1898 reached a stage of about 15 ft, from profiles by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	1730	*1,570	*4.55	Aug. 17	1945	1,550	4.49
Feb. 12	0345	1,520	4.44				

Minimum discharge, 82 ft³/s Jan. 21, gage height, 1.35 ft; minimum daily, 108 ft³/s Jan. 21, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	172	275	175	1330	365	251	214	175	512	235	198
2	121	166	254	228	1210	354	220	242	166	336	204	182
3	119	194	333	339	763	331	214	264	159	220	176	172
4	118	238	273	389	556	316	210	222	153	181	158	164
5	116	269	443	334	560	316	229	210	150	179	147	163
6	114	208	590	285	654	298	684	204	147	217	143	163
7	114	185	419	260	522	288	384	200	278	223	180	159
8	115	175	353	240	450	284	319	232	280	176	190	152
9	123	167	313	227	408	284	291	297	176	156	160	170
10	142	191	300	220	381	273	271	332	162	149	149	153
11	124	363	271	221	469	264	259	310	173	147	159	146
12	119	229	253	205	1190	261	249	302	236	140	154	141
13	117	197	244	197	690	252	243	462	196	144	330	145
14	115	183	228	193	563	251	241	342	163	155	187	142
15	114	175	220	186	499	244	492	298	157	142	154	135
16	114	171	213	180	452	238	481	268	161	144	161	131
17	147	162	205	217	422	237	389	262	154	149	918	125
18	143	159	201	223	397	228	341	248	204	132	788	123
19	121	223	197	207	390	222	315	228	177	126	400	122
20	123	204	203	193	396	220	301	225	162	126	301	119
21	157	177	201	e108	368	226	284	214	151	125	260	118
22	262	169	223	e177	352	318	269	206	144	124	224	118
23	230	164	206	e177	342	302	261	207	142	154	202	116
24	318	159	198	184	339	271	261	201	146	174	261	141
25	314	156	206	187	363	258	269	199	141	177	493	123
26	217	151	191	166	528	242	242	192	135	161	324	125
27	169	148	187	163	626	234	238	185	130	159	286	138
28	217	733	185	175	386	231	238	181	130	299	245	120
29	351	444	181	168	---	230	227	183	138	303	219	118
30	238	316	178	167	---	222	218	176	213	247	269	115
31	191	---	176	349	---	227	---	175	---	337	227	---
TOTAL	5113	6648	7920	6740	15406	8287	8891	7481	5099	6014	8304	4237
MEAN	165	222	255	217	550	267	296	241	170	194	268	141
MAX	351	733	590	389	1330	365	684	462	280	512	918	198
MIN	114	148	176	108	339	220	210	175	130	124	143	115
CFSM	1.18	1.59	1.82	1.55	3.93	1.91	2.11	1.72	1.21	1.39	1.91	1.01
IN.	1.36	1.77	2.10	1.79	4.09	2.20	2.36	1.99	1.35	1.60	2.21	1.13

CAL YR 1984	TOTAL	151421	MEAN	414	MAX	2380	MIN	114	CFSM 2.96	IN.	40.23
WTR YR 1985	TOTAL	90140	MEAN	247	MAX	1330	MIN	108	CFSM 1.76	IN.	23.95

e Estimated

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/30	1025	WATER	0	1.98	222	23	6.60	17.0		8.3	470
84/11/16	1130	WATER	0	1.80	172	26	6.70	10.0	3.5	10.0	180
84/12/30	1310	WATER	0	1.82	177	26	6.60	11.0		10.0	500
85/01/31	1150	WATER	0			57	6.60	4.0		11.6	2700
85/02/27	1200	WATER	0	2.51	413	26	6.70	11.0	5.7	9.2	130
85/03/20	1100	WATER	0	1.97	219	27	6.60	7.0		10.9	80
85/04/11	1100	WATER	0	2.10	261	26	6.50	9.0		10.5	230
85/05/28	1245	WATER	0	1.77	180	22	6.70	16.0	4.3	8.7	310
85/06/24	1230	WATER	0	1.65	149	30	6.80	21.0		8.2	480
85/07/25	1130	WATER	0	1.72	167	29	6.90	20.0		8.3	510
85/08/29	1200	WATER	0.1	1.95	214	31	6.90	20.5	5.7	8.4	210
85/09/25	1130	WATER	0.1	1.58	123	30	6.90	17.0		8.5	200

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	1025	WATER	0	7	23	74					
84/11/16	1130	WATER	0	8	8	41	.15	.070	.200	.100	.060
84/12/30	1310	WATER	0	7	6	52					
85/01/31	1150	WATER	0	7	54	100					
85/02/27	1200	WATER	0	5	31	56	.22	.030	.200	.070	.010
85/03/20	1100	WATER	0	7	8	17					
85/04/11	1100	WATER	0	9	15	51					
85/05/28	1245	WATER	0	9	9	46					.010
85/06/24	1230	WATER	0	10	19	60					
85/07/25	1130	WATER	0	10	24	64					
85/08/29	1200	WATER	0.1	11	18	72	.16	.010	.200	.100	.040
85/09/25	1130	WATER	0.1	11	7	52					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/16	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/27	1200	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/28	1245	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/29	1200	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03500240 CARTOOGECHAYE CREEK NEAR FRANKLIN, NC

LOCATION.--Lat 35°09'31", long 83°23'40", Macon County, Hydrologic Unit 06010202, on downstream side of center pier of bridge on Secondary Road 1152, 0.1 mi downstream from unnamed creek, 1.8 mi south of Franklin, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--57.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1947, 1953-55, 1960. June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,017.18 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--24 years, 145 ft^3/s, 34.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,720 ft^3/s Oct. 4, 1964, gage height, 12.96 ft; minimum, 23 ft^3/s Aug. 29, Sept. 30, Oct. 8, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1949 reached a stage of 15.6 ft, from studies by Tennessee Valley Authority, discharge, about 7,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	0700	*1,030	*6.12	No other peak greater than base discharge.			

Minimum discharge, 37 ft^3/s September 21; minimum gage height, 1.22 ft Oct. 5, 6, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	65	116	82	859	135	95	73	53	166	108	76
2	45	64	117	116	576	130	91	79	53	79	91	69
3	44	65	131	159	351	124	89	79	51	66	77	65
4	43	84	107	174	246	119	88	72	49	59	68	62
5	42	81	216	148	268	125	97	71	48	59	63	61
6	44	69	272	129	269	114	199	67	48	68	62	62
7	43	64	186	117	218	109	125	67	149	67	67	63
8	42	62	150	109	187	109	112	83	119	55	62	62
9	47	60	131	101	168	109	106	107	70	51	67	56
10	58	88	118	99	157	105	101	106	67	49	65	55
11	45	164	110	99	255	102	97	93	62	56	62	53
12	44	90	103	92	398	101	94	88	73	70	69	50
13	45	78	97	89	259	97	93	98	60	95	74	52
14	45	72	93	86	214	96	93	88	56	84	57	51
15	44	68	89	87	189	94	150	83	54	132	54	49
16	44	68	87	89	171	92	119	76	56	108	54	45
17	61	64	82	97	161	94	107	77	52	79	323	44
18	52	62	82	90	149	89	100	75	70	66	179	44
19	48	152	79	90	152	87	96	71	66	59	109	43
20	52	105	94	86	144	87	93	67	59	54	87	42
21	62	88	87	78	136	92	91	66	55	53	77	41
22	76	79	133	e76	132	152	86	65	52	57	69	41
23	112	75	111	e74	131	127	84	68	53	87	65	42
24	109	71	103	e74	131	121	88	66	51	94	169	58
25	104	70	110	e74	151	115	84	64	47	72	287	46
26	73	66	100	e74	182	107	79	62	48	65	144	52
27	62	65	96	75	152	103	78	58	46	61	114	49
28	112	442	92	76	141	101	80	59	45	159	95	45
29	131	191	89	74	---	100	76	61	64	133	89	45
30	83	137	86	75	---	96	74	58	124	123	96	43
31	71	---	84	197	---	101	---	56	---	134	82	---
TOTAL	1931	2909	3551	3086	6547	3333	2965	2303	1900	2560	3085	1566
MEAN	62.3	97.0	115	99.5	234	108	98.8	74.3	63.3	82.6	99.5	52.2
MAX	131	442	272	197	859	152	199	107	149	166	323	76
MIN	42	60	79	74	131	87	74	56	45	49	54	41
CFSM	1.09	1.70	2.01	1.74	4.10	1.89	1.73	1.30	1.11	1.45	1.74	.91
IN.	1.26	1.90	2.31	2.01	4.27	2.17	1.93	1.50	1.24	1.67	2.01	1.02

CAL YR 1984	TOTAL	57029	MEAN	156	MAX	1150	MIN	41	CFSM	2.73	IN. 37.15
WTR YR 1985	TOTAL	35736	MEAN	97.9	MAX	859	MIN	41	CFSM	1.71	IN. 23.28

e Estimated

03500240 CARTOOGECHAYE CREEK NEAR FRANKLIN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
85/01/31	1050	WATER	0	2.62	222	37	6.70	2.0		12.2	900
85/02/27	1130	WATER	0	2.17	151	33	6.80	9.0	2.3	10.4	90
85/03/20	1030	WATER	0	1.68	86	27	6.80	6.0		11.7	50
85/04/11	1030	WATER	0	1.76	96	29	6.50	8.0		11.2	50
85/05/28	1210	WATER	0	1.41	58	30	7.20	15.5	2.3	9.0	240
85/06/24	1200	WATER	0	1.35	52	34	7.20	20.5		8.8	190
85/07/25	1100	WATER	0	1.58	71	40	7.20	19.5		8.8	680
85/08/29	1110	WATER	0.1	1.73	104	34	7.20	19.0	2.5	9.0	250
85/09/25	1045	WATER	0.1	1.38	45	39	7.00	16.0		8.9	260

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/31	1050	WATER	0	10	91	140					
85/02/27	1130	WATER	0	10	9	48	.18	.070	.100	.010	.010K
85/03/20	1030	WATER	0	11	6	30					
85/04/11	1030	WATER	0	12	7	41					
85/05/28	1210	WATER	0	20	10	42	.13	.030	.100K	.020	.010K
85/06/24	1200	WATER	0	14	7	48					
85/07/25	1100	WATER	0	15	11	56					
85/08/29	1110	WATER	0.1	15	12	58	.10	.010	.100	.030	.010K
85/09/25	1045	WATER	0.1	14	5	53					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/27	1130	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/28	1210	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/29	1110	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03503000 LITTLE TENNESSEE RIVER AT NEEDMORE, NC

LOCATION.--Lat 35°20'11", long 83°31'37", Swain County, Hydrologic Unit 06010202, on left bank on Secondary Road 1113, 0.8 mi downstream from DeHart Creek, 0.8 mi north of Needmore, 2.4 mi downstream from Brush Creek, 6.3 mi downstream from Tellico Creek and at mile 92.9.

DRAINAGE AREA.--436 mi^2.

PERIOD OF RECORD.--October 1943 to December 1981, October 1983 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,761.19 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority).

REMARKS.--Records good. Considerable diurnal fluctuation caused by Porters Bend powerplant at Lake Emory 20 mi upstream. Several measurements of water temperatures were made during the year.

AVERAGE DISCHARGE.--40 years (1944-81, 1984-85), 1,070 ft^3/s, 33.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,100 ft^3/s Oct. 5, 1964, gage height, 12.87 ft in gage well, 13.06 ft from outside gage; minimum, 52 ft^3/s Nov. 7, 8, 1954, gage height, 1.16 ft, minimum daily, 71 ft^3/s Nov. 7, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of October 1898 and Aug. 30, 1940, reached stages of about 13 ft and 11.5 ft respectively, from flood profiles by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	2000	*5,520	*5.89	No other peak greater than base discharge.			

Minimum discharge, 219 ft^3/s Oct. 13, gage height, 1.68 ft; minimum daily, 236 ft^3/s Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	505	786	543	4470	1030	687	571	456	1280	628	654
2	360	479	726	632	4390	957	638	589	441	776	631	590
3	367	510	916	847	2690	919	616	692	426	574	529	559
4	348	579	805	1100	1790	887	604	597	413	484	472	523
5	342	864	1020	973	1610	899	611	564	403	460	420	494
6	343	615	1840	850	1900	847	1510	553	394	491	412	489
7	333	538	1250	768	1510	803	991	537	445	577	460	483
8	342	501	998	720	1270	791	861	588	1040	483	628	472
9	357	492	888	671	1150	795	780	760	565	433	581	523
10	448	498	820	657	1050	768	733	825	448	405	508	470
11	456	1060	775	657	1110	751	706	817	459	443	475	412
12	394	743	722	613	3310	734	683	817	507	427	470	414
13	236	588	683	575	1960	714	667	1060	568	427	618	410
14	331	555	833	578	1580	702	661	833	453	545	484	398
15	335	517	467	568	1370	692	1040	743	427	509	448	386
16	311	515	604	564	1200	667	1420	674	418	495	426	388
17	443	484	597	607	1150	667	998	668	424	461	1970	372
18	461	469	583	625	1080	654	886	638	489	395	2490	356
19	378	619	573	594	1060	629	824	594	507	376	1080	351
20	335	673	591	575	1060	624	782	570	453	362	820	351
21	395	552	604	455	1030	634	740	556	417	353	696	333
22	584	515	655	e533	1000	826	723	525	398	386	630	325
23	752	498	673	e700	982	931	683	531	383	524	555	337
24	831	481	625	e681	956	790	702	522	387	558	709	349
25	734	470	631	e604	965	779	711	521	384	586	1600	369
26	698	460	606	591	1300	723	644	503	388	492	957	346
27	496	456	581	592	1200	699	620	479	366	447	818	368
28	491	2030	588	562	1090	680	635	493	348	569	702	345
29	1010	1470	590	591	---	682	628	495	356	951	633	314
30	738	953	581	536	---	657	587	481	631	651	1080	306
31	561	---	558	879	---	647	---	460	---	802	800	---
TOTAL	14616	19689	23169	20441	45233	23578	23371	19256	13794	16722	23730	12487
MEAN	471	656	747	659	1615	761	779	621	460	539	765	416
MAX	1010	2030	1840	1100	4470	1030	1510	1060	1040	1280	2490	654
MIN	236	456	467	455	956	624	587	460	348	353	412	306
CFSM	1.08	1.50	1.71	1.51	3.70	1.75	1.79	1.42	1.06	1.24	1.75	.95
IN.	1.25	1.68	1.98	1.74	3.86	2.01	1.99	1.64	1.18	1.43	2.02	1.07

CAL YR 1984	TOTAL	428891	MEAN	1172	MAX	8140	MIN	236	CFSM 2.69	IN.	36.59
WTR YR 1985	TOTAL	256086	MEAN	702	MAX	4470	MIN	236	CFSM 1.61	IN.	21.85

e Estimated

TENNESSEE RIVER BASIN

03504000 NANTAHALA RIVER NEAR RAINBOW SPRINGS, NC

LOCATION.--Lat 35°07'37", long 83°37'09", Macon County, Hydrologic Unit 06010202, on right bank on Nantahala Forest Service Road 437, 300 ft upstream from Roaring Fork, 0.2 mi downstream from Buck Creek, 5 mi downstream from town of Rainbow Springs, and at mile 34.3.

DRAINAGE AREA.--51.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 973: 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 3,072.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional slight diurnal fluctuation at low flow caused by small ponds on tributaries above station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--45 years, 205 ft^3/s, 53.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,300 ft^3/s June 16, 1949, gage height, 9.70 ft from rating curve extended above 3,000 ft^3/s on basis of slope-area measurement of peak flow; minimum, 33 ft^3/s Nov. 18, 19, 1953, gage height, 0.60 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 28	0600	*1,540	*3.96	No other peak greater than base discharge.			

Minimum discharge, 52 ft^3/s Oct. 16, 17, 19, gage height 0.76 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	84	172	147	1020	240	158	117	95	191	182	160
2	63	84	188	224	669	231	147	149	88	130	162	151
3	61	87	204	243	441	217	143	136	85	97	143	144
4	60	126	170	243	348	211	140	120	83	90	130	140
5	58	112	306	211	432	229	183	116	82	112	120	135
6	57	94	334	195	404	201	301	113	81	153	121	136
7	57	88	259	184	337	193	194	110	225	126	128	127
8	60	83	228	174	300	189	179	140	178	103	126	134
9	71	80	205	166	276	188	170	162	107	94	126	130
10	71	115	196	168	258	179	162	188	96	89	146	117
11	59	163	178	167	408	175	157	159	97	99	133	112
12	57	108	167	153	455	179	152	148	168	87	121	109
13	55	97	159	e146	337	170	150	221	109	146	126	109
14	54	92	151	e146	303	167	147	175	98	145	105	104
15	54	89	145	139	284	161	229	156	94	138	98	99
16	54	98	140	e136	273	158	179	145	96	128	98	96
17	89	86	136	158	252	156	165	153	91	112	639	93
18	62	83	132	138	239	152	157	142	149	101	363	92
19	55	194	134	133	247	148	152	127	128	94	244	91
20	58	125	212	116	239	145	148	122	108	89	204	88
21	79	110	163	e95	233	156	144	118	97	123	181	87
22	129	102	295	e154	232	217	139	115	92	119	163	86
23	172	97	207	e185	235	176	140	116	91	128	155	93
24	136	93	196	e171	235	179	150	112	88	163	310	107
25	110	90	212	e136	290	167	137	109	92	131	392	85
26	80	87	183	e138	310	158	130	102	89	131	271	94
27	71	86	173	e141	271	153	127	98	82	126	239	93
28	174	566	167	132	252	155	139	102	81	198	214	82
29	174	244	160	e121	---	151	126	101	81	207	195	79
30	111	198	155	115	---	145	120	96	116	189	185	78
31	92	---	150	274	---	175	---	94	---	220	170	---
TOTAL	2552	3761	5877	5049	9580	5521	4765	4062	3167	4059	5990	3251
MEAN	82.3	125	190	163	342	178	159	131	106	131	193	108
MAX	174	566	334	274	1020	240	301	221	225	220	639	160
MIN	54	80	132	95	232	145	120	94	81	87	98	78
CFSM	1.59	2.41	3.66	3.14	6.59	3.43	3.06	2.52	2.04	2.52	3.72	2.08
IN.	1.83	2.70	4.21	3.62	6.87	3.96	3.42	2.91	2.27	2.91	4.29	2.33

CAL YR 1984 TOTAL 77561 MEAN 212 MAX 1180 MIN 54 CFSM 4.08 IN. 55.39
WTR YR 1985 TOTAL 57634 MEAN 158 MAX 1020 MIN 54 CFSM 3.04 IN. 41.31

e Estimated

03504000 NANTAHALA RIVER NEAR RAINBOW SPRINGS, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/30	1100	WATER	0	1.00	112	18	6.70	15.0		9.2	10K
84/11/16	1230	WATER	0	1.04	103	13	6.70	8.0	.4	10.6	10K
84/12/30	1400	WATER	0	1.25	154	13	6.60	11.0		9.7	20
85/01/31	1230	WATER	0	1.39	260	15	6.50	1.0		12.0	10
85/02/27	1315	WATER	0	1.60	278	13	6.70	9.0	1.0K	10.0	10K
85/03/20	1140	WATER	0	1.18	146	14	6.70	6.0		11.0	10K
85/04/11	1230	WATER	0	1.22	157	16	6.50	8.0		10.6	10K
85/05/20	1430	WATER	0	1.06	285	15	6.70	13.0	1.0K	9.5	10
85/06/24	1400	WATER	0	.94	91	21	7.00	19.0		8.8	10
85/07/25	1300	WATER	0	1.14	129	23	7.10	17.0		9.2	25
85/08/29	1330	WATER	0.1	1.40	197	14	7.10	17.0	1.0	9.2	10
85/09/25	1245	WATER	0.1	.94	85	18	7.00	14.0		9.5	20

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/30	1100	WATER	0	5	6	56					
84/11/16	1230	WATER	0	5	1	31	.01	.060	.100	.010	.010K
84/12/30	1400	WATER	0	6	2	36					
85/01/31	1230	WATER	0	3	9	23					
85/02/27	1315	WATER	0		4	25	.02	.070	.200	.010	.010K
85/03/20	1140	WATER	0	5	3	19					
85/04/11	1230	WATER	0	7	4	35					
85/05/20	1430	WATER	0	8	3	31	.04	.020	.100K	.010	.010K
85/06/24	1400	WATER	0	7	2	28					
85/07/25	1300	WATER	0	8	3	34					
85/08/29	1330	WATER	0.1	8	2	51	.01	.010	.200	.020	.010K
85/09/25	1245	WATER	0.1	8	1K	25					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/16	1230	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/27	1315	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/20	1430	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/29	1330	WATER	0.1	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

03512000 OCONALUFTEE RIVER AT BIRDTOWN, NC

LOCATION.--Lat 35°27'41", long 83°21'13", Swain County, Hydrologic Unit 06010203, in Cherokee Indian Reservation on left bank 200 ft upstream from bridge on Secondary Road 1359, 0.5 mi south of Birdtown, 0.6 mi downstream from Adams Creek, 0.6 mi upstream from Goose Creek, 2.2 mi southwest of Cherokee, and at mile 3.1.

DRAINAGE AREA.--184 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1945 to September 1946, July 1948 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,843.30 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good. Tennessee Valley Authority has a stage radio telemeter at station.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--38 years, 520 ft^3/s, 38.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft^3/s Dec. 30, 1969, gage height, 12.46 ft, from floodmarks; minimum, 80 ft^3/s Oct. 19, 1954, gage height, 0.66 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of Nov. 19, 1906 and Mar. 27, 1913 reached stages of 18 ft and 14.5 ft, respectively, discharge not determined, from studies by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1230	*9,360	*8.62	No other peak greater than base discharge.			

Minimum daily discharge, 119 ft^3/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	169	341	295	4570	646	423	291	248	408	304	244
2	180	164	317	615	2920	598	371	323	266	280	357	226
3	169	164	346	585	1730	547	352	412	250	223	260	211
4	161	181	291	794	1160	515	343	347	226	202	229	199
5	161	242	364	661	1080	582	348	314	218	203	206	189
6	158	232	565	546	1060	497	638	298	228	242	201	189
7	155	196	411	491	862	461	444	290	316	236	330	195
8	155	182	376	441	721	441	410	345	364	207	309	191
9	158	175	346	397	659	539	395	372	248	192	250	198
10	188	202	328	374	608	475	379	359	225	188	261	183
11	162	500	305	365	685	442	365	333	253	215	233	163
12	155	275	286	324	932	443	349	324	342	185	207	156
13	155	228	269	309	689	410	335	444	266	188	221	155
14	155	209	254	313	619	390	327	421	226	176	206	161
15	155	202	244	281	565	369	576	384	217	222	186	155
16	152	225	236	271	529	351	539	336	216	220	196	152
17	162	198	227	294	503	341	467	398	215	174	1030	145
18	161	189	224	271	477	326	428	725	292	169	786	139
19	155	601	221	262	511	316	408	470	243	161	482	144
20	152	379	296	234	495	313	388	395	220	158	443	136
21	160	295	331	e129	497	309	370	360	212	153	590	129
22	215	259	514	e244	519	385	352	338	208	178	387	130
23	283	242	403	e278	606	383	340	350	209	246	326	130
24	304	228	363	e286	735	464	346	329	211	187	333	159
25	227	217	454	285	798	450	337	355	206	177	577	135
26	205	209	404	e300	970	406	316	317	190	211	448	138
27	181	205	377	e286	797	403	315	294	173	280	385	146
28	200	945	354	267	707	402	367	278	175	362	353	133
29	272	499	337	252	---	410	327	283	196	376	320	124
30	196	384	321	229	---	383	304	264	210	275	289	119
31	177	---	309	421	---	404	---	261	---	291	269	---
TOTAL	5679	8396	10414	11100	27004	13401	11659	11010	7069	6985	10974	4874
MEAN	183	280	336	358	964	432	389	355	236	225	354	162
MAX	304	945	565	794	4570	646	638	725	364	408	1030	244
MIN	152	164	221	129	477	309	304	261	173	153	186	119
CFSM	.99	1.52	1.83	1.95	5.24	2.35	2.11	1.93	1.28	1.22	1.92	.88
IN.	1.15	1.70	2.11	2.24	5.46	2.71	2.36	2.23	1.43	1.41	2.22	.99

CAL YR 1984 TOTAL 218300 MEAN 596 MAX 4890 MIN 148 CFSM 3.24 IN. 44.13
WTR YR 1985 TOTAL 128565 MEAN 352 MAX 4570 MIN 119 CFSM 1.91 IN. 25.99

e Estimated

03512000 OCONALUFTEE RIVER AT BIRDTOWN, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
85/01/31	1410	WATER	0	1.74	389	30	6.60	1.0		12.7	170
85/02/28	0930	WATER	0	2.23	718	14	6.40	4.0	1.0K	12.0	40
85/03/26	0920	WATER	0	1.74	431	21	6.50	5.0		12.7	10
85/04/15	0845	WATER	0	1.68	384	25	6.60	12.0		10.0	330
85/05/01	0745	WATER	0	1.48	299	26	6.10	14.0	1.3	9.3	130
85/06/11	0800	WATER	0	1.30	230	24	6.70	19.0		8.6	350
85/07/02	0730	WATER	0	1.48	258	23	7.00	17.0		8.9	9100
85/08/07	0830	WATER	0	1.26	204	32	6.90	18.5		8.7	2500
85/09/05	0930	WATER	0.1	1.29	207	24	7.10	20.0		8.7	

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
85/01/31	1410	WATER	0	5	20	48					
85/02/28	0930	WATER	0	3	3	26	.32	.020	.100K	.020	.010K
85/03/26	0920	WATER	0	4	3	20	.24	.010	.200	.020	.010
85/04/15	0845	WATER	0	5	12	27	.23	.040	.600	.040	.010
85/05/01	0745	WATER	0	5	5	28	.22	.040	.200	.110	.010
85/06/11	0800	WATER	0	8	9	28	.28	.020	.100	.050	.010
85/07/02	0730	WATER	0	8	23	62	.28	.070	.200	.070	.010
85/08/07	0830	WATER	0	8	27	92	.29	.050	.200	.060	.010
85/09/05	0930	WATER	0.1	7	4	45	.32	.030	.200	.050	.010

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
85/02/28	0930	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/01	0745	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/07	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC

LOCATION.--Lat 35°25'40", long 83°26'51", Swain County, Hydrologic Unit 06010203, on left bank 400 ft downstream from bridge on Secondary Road 1364, Everett Street, in Bryson City, 0.6 mi downstream from Deep Creek, and at mile 12.6.

DRAINAGE AREA.--655 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1897 to December 1981, October 1983 to September 1984. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 523: 1916, 1918-20. WSP 823: Drainage area. WSP 1306: 1898-1913. WSP 1336: 1907, 1915(M), 1916-20, 1921-29(M), 1933-34(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,714.54 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Nov. 7, 1897, to Feb. 2, 1914, and May 18, 1920, to June 27, 1927, nonrecording gage at bridge 400 ft upstream at datum 2.00 ft higher. Feb. 3, 1914, to May 17, 1920, water-stage recorder at site 200 ft upstream at datum 2.00 ft higher. June 28, 1927, to Sept. 30, 1960, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Considerable diurnal fluctuation caused by powerplants above station. Flow regulated by Thorpe Reservoir, Cedar Cliff Lake, Bear Creek Lake, Tennessee Creek project lakes (see pp. 502, 504), and two small reservoirs with combined capacity of 250 ft^3/s-day.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--86 years (water years 1898-1981, 1984-85), 1,591 ft^3/s, 32.99 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft^3/s Aug. 30, 1940, gage height, 15.96 ft datum then in use, from rating curve extended above 28,000 ft^3/s on basis of slope-area measurement of peak flow; minimum, 27 ft^3/s Sept. 10, 1925, minimum gage height, 0.47 ft Oct. 26, 1952, datum then in use; minimum daily discharge, 31 ft^3/s Sept. 9, 10, 1925, caused by filling reservoir on Oconaluftee River; minimum daily during normal regulation, 186 ft^3/s Oct. 13, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1840, Mar. 6, 1867, and June 1876 reached stages of 22 ft, 19 ft, and 19 ft, respectively, present site and datum, discharge not determined, from studies by Tennessee Valley Authority. The flood in May 1840 exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/2)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Feb. 1	1400	*14,700	*8.86	No other peak greater than base discharge.			

Minimum discharge, 414 ft^3/s Oct. 6; minimum gage height, 1.61 ft Aug. 5, Sept. 16; minimum daily, 482 ft^3/s Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	873	775	1090	927	8440	1760	978	809	691	1550	758	665
2	776	754	1020	1460	6120	1690	927	924	844	816	825	628
3	899	794	1150	1750	3980	1430	929	1130	771	904	661	931
4	747	772	936	1980	2880	1390	873	1030	665	896	610	745
5	638	964	1250	1560	2600	1440	842	970	698	739	539	589
6	534	1080	1920	1320	2780	1370	1530	758	859	719	597	610
7	500	921	1890	1230	2390	1350	1180	768	841	773	835	613
8	549	891	1550	1390	1790	1220	1120	947	1050	669	807	578
9	565	856	1120	1330	1690	1240	1320	1150	748	946	691	589
10	721	689	1040	1020	1530	1420	1290	1300	629	812	658	558
11	629	1660	1060	948	1770	1210	922	966	724	799	659	670
12	616	888	1160	864	3320	1050	930	1020	929	822	583	793
13	718	896	973	960	2420	1070	864	1160	884	745	675	578
14	596	834	905	877	2090	1160	871	1020	698	848	656	546
15	556	893	1120	920	2010	1060	1750	1040	602	717	581	548
16	632	822	889	888	1710	980	1630	1070	626	844	599	618
17	632	791	1010	928	1540	900	1420	1110	623	820	2320	553
18	625	735	704	903	1540	943	1360	1490	1160	688	2240	497
19	575	1400	919	866	1650	1060	1340	1210	895	596	1580	487
20	577	1090	1050	813	1610	972	1250	1170	777	693	1420	482
21	601	912	972	1270	1420	899	1060	916	697	696	1560	495
22	706	884	1070	1470	1380	1200	1010	882	607	698	906	489
23	930	860	1330	953	1580	1140	826	1020	632	1050	751	534
24	1040	795	1060	1030	1560	1130	935	868	599	899	1060	897
25	781	800	1160	801	1680	1230	817	890	603	678	1780	694
26	712	757	1290	809	2540	1310	764	970	679	649	1470	524
27	627	736	1000	858	1830	1060	1000	841	662	791	1000	582
28	684	2380	1010	814	1760	1020	1210	944	672	881	972	528
29	1000	1940	942	850	---	1010	967	854	681	972	853	507
30	703	1700	903	735	---	1060	769	755	698	996	1290	544
31	670	---	847	1200	---	919	---	771	---	776	828	---
TOTAL	21412	30269	34340	33724	67610	36693	32684	30773	22244	25482	30764	18072
MEAN	691	1009	1108	1088	2415	1184	1089	993	741	822	992	602
MAX	1040	2380	1920	1980	8440	1760	1750	1490	1160	1550	2320	931
MIN	500	689	704	735	1380	899	764	755	599	596	539	482

CAL YR 1984	TOTAL	656410	MEAN	1793	MAX	13100	MIN 500
WTR YR 1985	TOTAL	384067	MEAN	1052	MAX	8440	MIN 482

03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MPN-FCBR /100ML
84/10/23	0730	WATER	0	2.34	1050	35	6.70	17.0		8.7	2300
84/11/20	0710	WATER	0	2.37	1110	26	6.70	9.0	3.5	10.2	1900
84/12/31	0840	WATER	0	2.10	842	26	6.60	11.0		10.1	300
85/01/16	0945	WATER	0	2.05	795	23	6.80	.0		12.1	60
85/02/28	1015	WATER	0	3.05	1930	21	6.50	6.0	1.5	11.4	320
85/03/26	1000	WATER	0	2.25	989	20	6.50	8.0		12.0	130
85/04/15	0915	WATER	0	2.64	1420	27	6.80	14.0		9.5	250
85/05/01	0830	WATER	0	1.94	695	34	6.40	16.0	2.3	8.9	150
85/06/11	0845	WATER	0	1.94	695	31	6.90	21.0		8.2	610
85/07/02	0800	WATER	0	2.08	823	26	6.80	17.0		8.9	4000
85/08/07	0915	WATER	0	1.89	651	28	7.00	20.0	1.9	8.5	840
85/09/05	1030	WATER	0.1	1.83	600	27	7.00	22.0		8.4	330

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/23	0730	WATER	0	10	87	130					
84/11/20	0710	WATER	0	6	24	61	.28	.080	.300	.060	.010K
84/12/31	0840	WATER	0	7	10	38					
85/01/16	0945	WATER	0		3	12					
85/02/28	1015	WATER	0	7	8	33	.23	.010	.100	.020	.010K
85/03/26	1000	WATER	0	6	5	31					
85/04/15	0915	WATER	0	9	19	36					
85/05/01	0830	WATER	0	9	6	33	.15	.030	.200	.040	.010K
85/06/11	0845	WATER	0	10	13	29					
85/07/02	0800	WATER	0	9	34	71					
85/08/07	0915	WATER	0	9	13	59	.20	.040	.300	.040	.010K
85/09/05	1030	WATER	0.1	10	4	45					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/20	0710	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/28	1015	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/01	0830	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/07	0915	WATER	0	10K	20K	50K	20K	100K		100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03548500 HIWASSEE RIVER ABOVE MURPHY, NC

LOCATION.--Lat 35°04'49", long 84°00'10", Cherokee County, Hydrologic Unit 06020002, on right bank on U.S. Highway 64, 600 ft upstream from Will Scott Creek, 2.0 mi southeast of Murphy, and at mile 99.1.

DRAINAGE AREA.--406 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1896 to August 1897, gage heights only, October 1897 to current year. Published as "at Murphy" 1897-1940. Records published for both sites August 1939 to April 1940. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORD.--WSP 583: 1899(M). WSP 973: Drainage area. WSP 1003: 1943. WSP 1306: 1901-2, 1904-17, 1919(M), 1922(M), 1924-26(M). WSP 1706: 1899, 1907.

GAGE.--Water-stage recorder. Datum of gage is 1,538.23 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Prior to Jan. 30, 1921, nonrecording gage at bridge 2.8 mi downstream at datum 30.40 ft lower. Jan. 30, 1921 to Nov. 8, 1926, nonrecording gage 2.8 mi downstream at datum 28.40 ft lower. Nov. 9, 1926 to Apr. 30, 1940, water-stage recorder 2.8 mi downstream at datum 28.20 ft lower.

REMARKS.--No estimated daily discharges. Records good. Considerable diurnal fluctuation since 1924 caused by Mission powerplant at Andrews Dam 7 mi upstream, normal regulated storage, about 75 ft³/s-day. Flow regulated since 1942 by Chatuge Lake 22 mi upstream (station 03546500).

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--88 years (1898-1985), 920 ft³/s, 30.77 in/yr, adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,100 ft³/s Mar. 19, 1899, gage height, 18.4 ft from graph based on gage readings, site and datum then in use, from rating curve extended above 5,000 ft³/s; minimum daily, 10 ft³/s Dec. 3, 1924, result of freezeup and filling of Andrews Lake; minimum daily during normal regulation, 62 ft³/s Oct. 19, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed is that of Mar. 19, 1899.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,760 ft³/s Jan. 31, gage height, 6.25 ft; minimum, 106 ft³/s Sept. 30, gage height, 2.15 ft; minimum daily, 108 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	525	664	713	363	3260	1120	446	372	516	541	1070	239
2	672	557	277	1110	2700	779	717	414	142	501	1040	480
3	709	469	689	1220	1400	411	557	396	273	254	679	933
4	841	174	1040	1470	1120	643	416	351	628	380	234	656
5	692	191	1170	1180	1000	1040	412	201	679	286	366	204
6	447	689	1340	1110	952	1050	503	366	634	457	783	181
7	123	717	1420	1080	766	1030	343	697	679	287	790	493
8	355	676	795	1050	686	1020	517	379	668	237	790	998
9	682	864	346	995	717	706	537	398	219	376	831	856
10	702	610	537	1020	491	333	530	388	411	355	654	1060
11	707	342	306	1020	680	655	444	426	621	479	202	895
12	694	217	277	1060	1120	873	424	207	545	495	283	903
13	451	465	369	894	716	858	254	763	494	538	865	922
14	126	439	822	879	1060	851	250	493	190	191	999	599
15	244	457	789	987	1030	830	594	420	171	299	715	159
16	689	461	811	1090	675	497	529	401	172	592	651	456
17	781	447	872	1110	443	278	479	402	166	342	1050	954
18	751	177	884	719	749	542	471	393	233	194	715	820
19	726	223	879	618	990	649	287	205	288	494	665	821
20	571	502	986	420	1000	649	451	195	246	640	890	833
21	135	482	984	1250	983	655	260	360	811	592	854	503
22	329	477	680	872	1010	739	441	361	509	761	817	126
23	851	478	377	972	673	471	610	348	175	693	790	221
24	871	463	622	636	442	292	428	205	440	1000	775	438
25	777	183	876	596	817	553	419	339	835	610	1090	481
26	742	414	933	235	1340	660	388	169	839	392	993	472
27	563	602	1020	253	1230	648	381	165	839	441	1190	467
28	165	1220	996	791	1170	582	255	158	718	433	1090	432
29	421	1070	926	747	---	661	231	383	367	833	1060	112
30	712	1000	516	455	---	422	372	395	220	1100	1040	108
31	684	---	432	1890	---	264	---	716	---	1110	669	---
TOTAL	17738	15730	23684	28092	29220	20761	12946	11466	13728	15903	24640	16822
MEAN	572	524	764	906	1044	670	432	370	458	513	795	561
MAX	871	1220	1420	1890	3260	1120	717	763	839	1110	1190	1060
MIN	123	174	277	235	442	264	231	158	142	191	202	108

CAL YR 1984 TOTAL 370903 MEAN 1013 MAX 5780 MIN 123 MEAN† 998 CFSM† 2.46 IN.† 33.37
WTR YR 1985 TOTAL 230730 MEAN 632 MAX 3260 MIN 108 MEAN† 618 CFSM† 1.52 IN.† 20.67

† Adjusted for change in contents in Chatuge Lake.

TENNESSEE RIVER BASIN

03548500 HIWASSEE RIVER ABOVE MURPHY, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/23	0925	WATER	0	2.94	462	23	6.50	10.0		8.7	2300
84/11/20	1000	WATER	0	2.76	370	26	6.70	10.0	7.0	10.2	160
84/12/31	1025	WATER	0	2.65	316	26	6.70	11.0		10.3	60
85/01/16	1110	WATER	0	2.87	420	36	7.10	3.0		12.2	50
85/02/28	1100	WATER	0	3.00	552	27	6.70	7.0	2.0	11.4	30
85/03/26	1130	WATER	0	2.50	246	26	6.90	11.0		12.6	10
85/04/15	1115	WATER	0	2.99	406	35	6.90	14.0		9.6	3000
85/05/01	1100	WATER	0	2.35	177	26	6.60	17.0	2.0	9.1	250
85/06/11	1100	WATER	0	2.76	360	28	6.80	15.0		10.2	310
85/07/02	1000	WATER	0	2.81	385	32	6.80	18.0		8.6	4300
85/08/07	1400	WATER	0	2.30	196	7	7.10	17.0	2.6	10.3	95
85/09/05	1230	WATER	0.1	2.53	254	30	7.60	20.0		9.8	

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/23	0925	WATER	0	6	22	54					
84/11/20	1000	WATER	0	7	11	41	.06	.090	.300	.020	.010K
84/12/31	1025	WATER	0	9	4	21					
85/01/16	1110	WATER	0		5	14					
85/02/28	1100	WATER	0	8	4	34	.17	.020	.200	.010	.010K
85/03/26	1130	WATER	0	7	2	28					
85/04/15	1115	WATER	0	11	12	23					
85/05/01	1100	WATER	0	10	3	15	.13	.030	.200	.040	.010K
85/06/11	1100	WATER	0	9	6	14					
85/07/02	1000	WATER	0	9	28	74					
85/08/07	1400	WATER	0	10	6	61	.18	.030	.100K	.020	.010K
85/09/05	1230	WATER	0.1	13							

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/20	1000	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/28	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/01	1100	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/07	1400	WATER	0	10K	20K	50K	20K	100K	.4	100K	20K

K Less than noted value.

TENNESSEE RIVER BASIN

03550000 VALLEY RIVER AT TOMOTLA, NC

LOCATION.--Lat 35°08'20", long 83°58'50", Cherokee County, Hydrologic Unit 06020002, on right bank at site of former bridge on Secondary Road 1373 at Tomotla, 600 ft upstream from bridge on U.S. Highway 64, 0.2 mi upstream from Roger Creek, 4.7 mi northeast of Murphy, and at mile 6.6.

DRAINAGE AREA.--104 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1904 to December 1909, January 1914 to April 1917, October 1918 to current year.

REVISED RECORDS.--WSP 503: 1905-9, 1915-17. WSP 823: Drainage area. WSP 1306: 1917(M), 1920(M), 1922(M), 1925(M), 1930(M), 1933(M). WSP 1626: 1907(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,556.46 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). Prior to May 11, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good.

COOPERATION.--Chemical and biological data shown in last table were provided by the North Carolina Department of Natural Resources and Community Development.

AVERAGE DISCHARGE.--73 years (1905-8, 1915-16, 1919-85), 255 ft³/s, 33.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s Nov. 19, 1906, gage height, 20.5 ft, from flood profile by Tennessee Valley Authority, from rating curve extended above 5,800 ft³/s on basis of slope-conveyance study; minimum, 12 ft³/s several times in August and September 1925, gage height, 0.52 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1898 reached a stage of 21.2 ft, from floodmark by Tennessee Valley Authority, discharge, about 20,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 1	1430	*2,560	*8.65	No other peak greater than base discharge.			

Minimum discharge, 49 ft³/s Sept. 30, gage height, 1.78 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	76	132	136	2130	263	167	115	80	220	163	125
2	59	78	132	289	1560	256	154	143	75	139	140	110
3	58	82	170	293	868	235	148	166	71	101	130	99
4	56	83	135	318	560	225	146	128	70	91	105	94
5	55	88	191	284	566	272	165	119	68	104	93	97
6	53	80	315	244	540	235	319	113	66	104	88	90
7	52	75	233	217	452	222	219	110	154	97	87	89
8	52	74	185	193	387	216	198	131	159	85	99	95
9	57	72	158	173	341	217	184	143	92	79	174	90
10	72	104	149	172	311	204	173	140	81	74	161	83
11	58	161	136	175	348	197	165	128	92	94	115	78
12	55	84	125	154	463	198	156	119	137	74	100	73
13	54	72	118	145	373	188	152	144	99	95	127	73
14	52	68	111	140	335	181	148	121	84	84	90	74
15	52	66	106	133	306	175	253	111	79	80	79	69
16	52	75	102	127	282	168	208	104	78	77	95	67
17	69	68	99	161	272	166	186	108	77	69	428	64
18	63	65	96	147	274	159	173	117	129	69	406	62
19	56	225	97	143	329	153	165	102	118	65	244	60
20	56	130	188	130	337	151	157	97	105	60	178	58
21	58	100	165	e62	319	151	150	96	88	58	154	56
22	81	90	278	e93	303	211	143	94	80	70	131	55
23	136	83	254	e101	295	191	138	100	76	106	119	57
24	150	79	220	e114	284	191	141	95	72	112	334	66
25	97	75	251	121	308	180	135	94	70	89	591	57
26	82	72	227	e93	344	171	127	90	83	94	348	55
27	76	71	202	e88	304	165	128	85	68	120	259	57
28	78	318	179	117	278	164	142	87	65	183	206	53
29	132	188	162	110	---	161	127	90	65	174	168	52
30	91	147	153	112	---	154	117	83	107	129	153	50
31	81	---	143	459	---	168	---	82	---	151	143	---
TOTAL	2212	3049	5212	5244	13469	5988	4984	3455	2688	3147	5708	2208
MEAN	71.4	102	168	169	481	193	166	111	89.6	102	184	73.6
MAX	150	318	315	459	2130	272	319	166	159	220	591	125
MIN	52	65	96	62	272	151	117	82	65	58	79	50
CFSM	.69	.98	1.62	1.62	4.62	1.86	1.60	1.07	.86	.98	1.77	.71
IN.	.79	1.09	1.86	1.88	4.82	2.14	1.78	1.24	.96	1.13	2.04	.79

CAL YR 1984	TOTAL	94313	MEAN	258	MAX	3320	MIN	52	CFSM	2.48	IN. 33.74
WTR YR 1985	TOTAL	57364	MEAN	157	MAX	2130	MIN	50	CFSM	1.51	IN. 20.52

e Estimated

03550000 VALLEY RIVER AT TOMOTLA, NC --Continued

WATER QUALITY DATA PROVIDED BY NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	STREAM STAGE FEET	STREAM FLOW, INST-CFS	CNDUCTVY FIELD MICROMHO	PH SU	WATER TEMP CENT	TURB TRBIDMTR HACH FTU	DO MG/L	FEC COLI MFM-FCBR /100ML
84/10/23	0900	WATER	0	2.12	108	58	6.80	17.0		8.2	2400
84/11/20	0920	WATER	0	2.22	131	50	6.90	9.0	2.0	9.8	2000
84/12/31	1000	WATER	0	2.27	144	50	6.80	12.0		9.5	610
85/01/16	1050	WATER	0	2.22	131	37	7.00	1.0		13.0	170
85/02/28	1045	WATER	0	2.67	281	34	6.80	7.0	1.0K	11.0	120
85/03/26	1100	WATER	0	2.33	170	42	6.90	10.0		11.7	30
85/04/15	1030	WATER	0	2.69	292	46	7.00	14.0		9.3	30000
85/05/01	1015	WATER	0	2.12	112	46	6.60	16.0	2.2	8.8	760
85/06/11	1015	WATER	0	1.95	77	53	7.00	20.0		8.0	1700
85/07/02	0915	WATER	0	2.25	139	46	7.20	18.0		8.7	5800
85/08/07	1100	WATER	0	1.98	86	52	7.40	20.5	2.5	8.4	1100
85/09/05	1145	WATER	0.1	2.08	99	54	7.40	22.0		8.3	1800

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	T ALK FIELD MG/L	RESIDUE TOT NFLT MG/L	RESIDUE TOTAL MG/L	NO2&NO3 N-TOTAL MG/L	NH3+NH4- N TOTAL MG/L	TOT KJEL N MG/L	PHOS-TOT MG/L P	PHOS-T ORTHO MG/L P
84/10/23	0900	WATER	0	20	14	71					
84/11/20	0920	WATER	0	18	10	53	.18	.130	.300	.030	.010K
84/12/31	1000	WATER	0	17	25	61					
85/01/16	1050	WATER	0		3	24					
85/02/28	1045	WATER	0	14	5	34	.22	.020	.100	.020	.010K
85/03/26	1100	WATER	0	18	3	28					
85/04/15	1030	WATER	0	16	32	56					
85/05/01	1015	WATER	0	16	8	37	.15	.040	.200	.130	.010K
85/06/11	1015	WATER	0	17	11	36					
85/07/02	0915	WATER	0	16	34	75					
85/08/07	1100	WATER	0	21	11	87	.19	.040	.200	.040	.010
85/09/05	1145	WATER	0.1	21	8	60					

DATE FROM TO	TIME OF DAY	MEDIUM	DEPTH (M)	ARSENIC AS,TOT UG/L	CADMIUM CD,TOT UG/L	CHROMIUM CR,TOT UG/L	COPPER CU,TOT UG/L	LEAD PB,TOT UG/L	MERCURY HG,TOTAL UG/L	NICKEL NI,TOTAL UG/L	ZINC ZN,TOT UG/L
84/11/20	0920	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/02/28	1045	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/05/01	1015	WATER	0	10K	20K	50K	20K	100K	.2K	100K	20K
85/08/07	1100	WATER	0	10K	20K	50K	20K	100K	.4	100K	20K

K Less than noted value.

OHIO RIVER BASIN

Lakes and Reservoirs in Ohio River basin

03460242 **WATERVILLE LAKE.**--Lat 35°41'41", long 83°03'02", Haywood County, Hydrologic Unit 06010206, at Waterville Dam on Pigeon River, 0.1 mi downstream from Cataloochee Creek, 5.5 mi southeast of Mount Sterling, and at mile 38.0. DRAINAGE AREA, 455 mi^2. PERIOD OF RECORD, October 1961 to current year. Prior to October 1979, published as Lake Walters. Gage, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by single arch, variable radius, concrete dam with fourteen taintor gates 10 ft high by 24 ft wide. Dam was completed in 1929 and filling began October 1929; water in reservoir first reached minimum pool elevation November 1929. Total capacity (new capacity table put into use Jan. 1, 1971), at elevation 2,258.6 ft, top of gates, is 12,800 ft^3/s-day, of which 10,400 ft^3/s-day is controlled storage above elevation 2,175 ft, normal minimum pool. Reservoir is used for power. Prior to Jan. 1, 1971 records furnished by Carolina Power and Light Co. Gage-height record furnished by Carolina Power and Light Co.; level storage records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 12,800 ft^3/s-day several days each year, elevation, 2,258.6 ft; minimum observed, 1,030 ft^3/s-day Sept. 16, 1980, elevation, 2,141.5 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 12,800 ft^3/s-day Feb. 2, elevation 2,258.6 ft; minimum observed, 7,460 ft^3/s-day Mar. 21, elevation, 2,223.10 ft.

03504500 **NANTAHALA LAKE.**--Lat 35°11'56", long 83°39'17", Macon County, Hydrologic Unit 06010202, at Nantahala Dam on Nantahala River, 4.2 mi southeast of Topton, 5.5 mi upstream from Whiteoak Creek, and at mile 22.8. DRAINAGE AREA, 91.0 mi^2. PERIOD OF RECORD, January 1942 to current year. Prior to October 1944 monthend contents only, published in WSP 1306. GAGE, water-stage recorder. Datum of gage is 122.16 ft National Geodetic Vertical Datum of 1929. (levels by Aluminum Co. of America); gage readings have been reduced to elevations NGVD. Prior to June 3, 1942, nonrecording gage at same site and datum.

Reservoir is formed by rockfill dam with side channel gate-controlled spillway supplemented by fuse-plug dam. Dam completed and storage began Jan. 30, 1942; water in reservoir first reached minimum pool elevation Feb. 16, 1942. Total capacity (based on 1969 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 2,890.0 ft, top of gates, is 69,200 ft^3/s-day, of which 63,500 ft^3/s-day is controlled storage above 2,758.84 ft, normal minimum pool. Reservoir is used for flood control and power. Gage-height record furnished by Aluminum Co. of America; level storage records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 70,400 ft^3/s-day Apr. 12, 1957, elevation, 2,890.55 ft; minimum, after first filling, 6,700 ft^3/s-day Jan. 28, 1955, elevation, 2,760.11 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 55,700 ft^3/s-day Apr. 29, elevation, 2,871.97 ft; minimum, 41,200 ft^3/s-day Jan. 30, elevation, 2,849.44 ft.

03507500 **THORPE RESERVOIR.**--Lat 35°11'46", long 83°09'09", Jackson County, Hydrologic Unit 06010203, at Thorpe Dam on West Fork Tuckasegee River, 2.3 mi northwest of Glenville, 3.0 mi upstream from Shoal Creek, and at mile 9.7. DRAINAGE AREA, 36.7 mi^2. PERIOD OF RECORD, February 1941 to current year. Prior to October 1944 monthend contents only, published in WSP 1306. Prior to October 1948, published as Glenville Reservoir. GAGE, water-stage recorder. Datum of gage is 391.75 ft National Geodetic Vertical Datum of 1929 (levels by Aluminum Co. of America); gage readings have been reduced to elevations NGVD. Prior to Apr. 9, 1941, nonrecording gage at same site and datum.

Reservoir is formed by earth and rock dam and six 40 ft fuse-plug dams. Side channel spillway equipped with two taintor gates 12 ft high by 25 ft wide. Dam completed and storage began Feb. 12, 1941. Water in reservoir first reached minimum pool elevation Mar. 15, 1941. Total capacity (based on 1969 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 3,100.0 ft, top of gates, is 35,500 ft^3/s-day, of which 33,700 ft^3/s-day is controlled storage above elevation 3,023.25 ft, normal minimum pool. Reservoir is used for flood control and power. Gage-height record furnidhed by Aluminum Co. of America; level storage records furnished by the Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 35,700 ft^3/s-day Mar. 13, 1950, elevation, 3,100.01 ft; minimum, after first filling, 2,200 ft^3/s-day Feb. 5, 1955, Jan. 13, 1956; minimum elevation, 3,025.10 ft Feb. 5, 1955.

EXTREMES FOR CURRENT YEAR: Maximum contents, 26,400 ft^3/s-day May 3, elevation, 3,086.79 ft. minimum, 17,800 ft^3/s-day Jan. 30, elevation, 3,071.79 ft.

03514500 **FONTANA LAKE.**--Lat 35°27'07", long 83°48'18", Graham County, Hydrologic Unit 06010202, at Fontana Dam on Little Tennessee River, 5.7 mi upstream from Twenty Mile Creek, 9.0 mi north of Robbinsville, 9.6 mi upstream from Cheoah Dam, and at mile 61.0. DRAINAGE AREA, 1,571 mi^2. PERIOD OF RECORD, October 1944 to current year. Prior to November 1944, monthend contents only, published in WSP 1306. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by gravity nonoverflow type concrete dam. Spillway equipped with four radial gates 35 ft high by 35 ft wide. Storage began Nov. 7, 1944; dam completed March 1945; water in reservoir first reached minimum pool elevation Jan. 16, 1945. Total capacity (based on 1967 resurvey; new capacity table put into use Jan. 1, 1971), at elevation, 1,710.0 ft, top of gates, is 727,500 ft^3/s-day, of which 476,900 ft^3/s-day is controlled storage above elevation 1,580.0 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 728,600 ft^3/s-day May 28, 1973, elevation, 1,710.20 ft; minimum, after first filling, 78,300 ft^3/s-day Jan. 29, 1955, elevation, 1,472.0 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 475,900 ft^3/s-day May 30, elevation, 1,655.17 ft; minimum, 316,800 ft^3/s-day Jan. 30, elevation, 1,606.60 ft.

03516500 **SANTEETLAH LAKE.**--Lat 35°22'38", long 83°52'33", Graham County, Hydrologic Unit 06010204, at Santeetlah Dam on Cheoah River, 1.0 mi downstream from Santeetlah Creek, 5.5 mi northwest of Robbinsville, and at mile 9.3. DRAINAGE AREA, 176 mi^2. PERIOD OF RECORD, December 1927 to current year. Prior to October 1946 monthend contents only, published in WSP 1306. GAGE, water-stage recorder. Datum of gage is 122.92 ft National Geodetic Vertical Datum of 1929 (levels by Aluminum Co. of America); gage readings have been reduced to elevations NGVD. Prior to February 1937, nonrecording gage at same site and datum.

Reservoir is formed by concrete gravity and arch dam with concrete spillway controlled by six taintor gates 12 ft high by 25 ft wide. Dam completed and storage began Dec. 7, 1927. Water in reservoir first reached minimum pool elevation December 1927. Total capacity (new capacity table put into use Jan. 1, 1971), at elevation 1,817.0 ft, top of gates, is 78,800 ft^3/s-day, of which 66,600 ft^3/s-day is controlled storage above 1,740.00 ft, normal minimum pool. Reservoir is used for power. Gage-height record furnished by Aluminum Co. of America; level storage records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 81,100 ft^3/s-day Sept. 3, 1928, elevation, 1,817.90 ft; minimum, after first filling, 13,100 ft^3/s-day Feb. 6, 1940, elevation, 1,741.39 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 60,200 ft^3/s-day May 28, elevation, 1,802.82 ft; minimum, 39,200 ft^3/s-day Jan. 30, elevation, 1,782.61 ft.

03546500 **CHATUGE LAKE.**--Lat 35°01'01", long 83°47'28", Clay County, Hydrologic Unit 06020002, at Chatuge Dam on Hiwassee River, 2.0 mi upstream from Hyatt Mill Creek, 2.5 mi downstream from Georgia-North Carolina State line, 2.4 mi southeast of Hayesville, and at mile 121.0. **DRAINAGE AREA**, 189 mi^2. **PERIOD OF RECORD**, February 1942 to current year. **GAGE**, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Aug. 4, 1942, nonrecording gage at same site and datum.

Reservoir is formed by a rolled earthfill dam with side channel spillway equipped with flashboards. Dam completed and storage began Feb. 12, 1942; water in reservoir first reached minimum pool elevation Feb. 26, 1942. Total capacity (based on 1965 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 1,928.0 ft, top of flashboards, is 121,200 ft^3/s-day, of which 61,700 ft^3/s-day is controlled storage above elevation 1,905.0 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority. (See sta 03548500)

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 124,200 ft^3/s-day Apr. 20, 1943, elevation, 1,927.80 ft; minimum, after first filling, 9,400 ft^3/s-day Sept. 5, 1947, Jan. 27, 1956; minimum elevation, 1,860.11 ft Sept. 5, 1947.

EXTREMES FOR CURRENT YEAR: Maximum contents, 94,000 ft^3/s-day July 15, elevation, 1,919.52 ft; minimum, 70,400 ft^3/s-day Jan. 25, elevation, 1,910.28 ft.

03554500 **HIWASSEE LAKE.**--Lat 35°09'01", long 84°10'40", Cherokee County, Hydrologic Unit 06020002, at Hiwassee Dam on Hiwassee River, 0.3 mi northwest of village of Hiwassee Dam, 3.9 mi upstream from Shoal Creek, and at mile 75.8. **DRAINAGE AREA**, 968 mi^2. **PERIOD OF RECORD**, September 1939 to current year. **GAGE**, water-stage recorder. Datum of gage is 0.63 ft below National Geodetic Vertical Datum of 1929.

Reservoir is formed by gravity overflow concrete dam with seven taintor gates 23 ft high by 32 ft wide. Slight storage began Apr. 13, 1939, during construction; systematic storage operation began Jan. 14, 1940; dam completed February 1940; water in reservoir first reached minimum pool elevation Feb. 23, 1940. Total capacity (based on 1965 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 1,526.5 ft, top of gates, is 218,800 ft^3/s-day of which 154,300 ft^3/s-day is controlled storage above elevation 1,450.0 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 223,400 ft^3/s-day May 28, 1973, elevation, 1,528.02 ft; minimum, after first filling, 35,800 ft^3/s-day Jan. 28, 1948, elevation, 1,413.41 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 140,200 ft^3/s-day Aug. 31, elevation, 1,497.38 ft; minimum, 75,500 ft^3/s-day Jan. 25, elevation, 1,459.48 ft.

03555500 **APPALACHIA LAKE.**--Lat 35°10'04", long 84°17'49", Cherokee County, Hydrologic Unit 06020002, at Appalachia Dam on Hiwassee River, 0.1 mi upstream from North Carolina-Tennessee State line, 1.5 mi northeast of Farner, TN, 9.8 mi downstream from Hiwassee Dam, and at mile 66.0. **DRAINAGE AREA**, 1,018 mi^2. **PERIOD OF RECORD**, February 1943 to current year. **GAGE**, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete gravity dam. Spillway equipped with 10 radial gates. Dam completed and storage began Feb. 14, 1943; water in reservoir first reached minimum pool elevation Feb. 21, 1943. Total capacity (based on 1965 resurvey; new capacity table put into use Jan. 1, 1971), at elevation 1,280.00 ft, top of gates, is 29,100 ft^3/s-day, of which 4,400 ft^3/s-day is controlled storage above elevation 1,272.00 ft, normal minimum pool. Reservoir is used for navigation, flood control, and power. Records furnished by Tennessee Valley Authority.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 30,300 ft^3/s-day June 13, 1952, elevation, 1,281.40 ft; minimum, after first filling, 15,300 ft^3/s-day Apr. 25, 1971, elevation, 1,251.00 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 28,600 ft^3/s-day Feb. 16, elevation 1,279.04 ft; minimum, 16,600 ft^3/s-day Dec. 14, elevation, 1,254.36 ft.

OTHER RESERVOIRS.--The following smaller reservoirs in the Tennessee River basin are described below, but records of contents are not published herein:

03447832 **LAKE JULIAN.**--Lat 35°28'37", long 82°32'51", Buncombe County, Hydrologic Unit 06010105, cooling water reservoir for Carolina Power and Light Co. plant, on Powells Creek near Skyland. Prior to November 1967, published as Asheville Steam-electric Generating Plant Lake. **DRAINAGE AREA**, 4.78 mi^2. Total capacity is 4,540 ft^3/s-day, of which 2,120 ft^3/s-day is controlled storage. Storage began Mar. 27, 1963, and lake reached spillway elevation of 2,160 ft on June 3, 1963. Most of initial storage and occasional supplemental storage provided by pumped diversion from French Broad River.

03448959 **BURNETT LAKE.**--Lat 35°39'44", long 82°20'43", Buncombe County, Hydrologic Unit 06010105, part of Asheville's municipal water supply, on North Fork Swannanoa River near Black Mountain. **DRAINAGE AREA**, 21.9 mi^2. Total capacity is 11,600 ft^3/s-day, crest of spillway, of which 8,900 ft^3/s-day is controlled storage. Storage began Jan. 28, 1954. (See sta 03451000)

03450134 **BEETREE RESERVOIR.**--Lat 35°38'27", long 82°24'04", Buncombe County, Hydrologic Unit 06010105, part of Asheville's municipal water supply, on Beetree Creek near Swannanoa. **DRAINAGE AREA**, 7.62 mi^2. Total capacity is 844 ft^3/s-day, of which 823 ft^3/s-day is controlled storage. Dam completed December 1926, and storage began Jan. 11, 1927; water in reservoir first reached maximum pool elevation Mar. 8, 1927. (See sta 03451000)

Lakes and Reservoirs in the Ohio River basin--Continued

03455773 **LAKE LOGAN.**--Lat 35°25'15", long 82°55'30", Haywood County, Hydrologic Unit 06010106, on West Fork Pigeon River near Canton, and at mile 7.0. DRAINAGE AREA, 33.3 mi^2. Total capacity is 1,040 ft^3/s-day, top of flashboards, all of which is usable. Storage began November 1931. (See sta 03456100)

03458319 **LAKE JUNALUSKA.**--Lat 35°31'38", long 82°57'48", Haywood County, Hydrologic Unit 06010106, on Richland Creek at Lake Junaluska and at mile 2.4. DRAINAGE AREA, 63.6 mi^2. Total surface area, about 195 acres. Lake reached spillway elevation in the spring of 1913.

03500466 **SEQUOYAH LAKE.**--Lat 35°04'02", long 83°13'31", Macon County, Hydrologic Unit 06010202, on Cullasaja River near Highlands, and at mile 18.4. DRAINAGE AREA, 14.4 mi^2. Total capacity is 233 ft^3/s-day, spillway crest, of which approximately 116 ft^3/s-day is usable. Storage began in 1926.

03507111; 03507131 **EAST FORK LAKE AND WOLF CREEK LAKE.**--These two reservoirs are operated as a unit for storage of water for the Tennnessee Creek Project. East Fork Dam DRAINAGE AREA, 24.9 mi^2 on Tuckasegee River near Tuckasegee, Jackson County, Hydrologic Unit 06010203, is at lat 35°12'48", long 83°00'08", Wolf Creek Dam DRAINAGE AREA, 15.2 mi^2 on Wolf Creek near Tuckasegee, is at lat 35°13'18", long 83°00'00". Total capacity of East Fork Lake is 671 ft^3/s-day, of which 625 ft^3/s-day is controlled storage. Storage began Apr. 18, 1955. Total capacity of Wolf Creek Lake is 5,070 ft^3/s-day, of which 3,850 ft^3/s-day is controlled storage. Storage began Mar. 22, 1955.

03507216 **BEAR CREEK LAKE.**--Lat 35°14'29", long 83° 04'22", Jackson County, Hydrologic Unit 06010203, on Tuckasegee River near Tuckasegee. DRAINAGE AREA, 74.8 mi^2. Total capacity is 17,500 ft^3/s-day, of which 2,290 ft^3/s-day is controlled storage. Storage began Oct. 9, 1953.

03507289 **CEDAR CLIFF LAKE.**--Lat 35°15'12", long 83°05'58", Jackson County, Hydrologic Unit 06010203, on Tuckasegee River near Tuckasegee, and at mile 51.9. DRAINAGE AREA, 80.3 mi^2. Total capacity is 3,200 ft^3/s-day, of which 350 ft^3/s-day is controlled storage. Storage began Apr. 26, 1952.

03515152 **CHEOAH LAKE.**--Lat 35°26'54", long 83°56'11", Graham County, Hydrologic Unit 06010202, on Little Tennessee River at Cheoah, and at mile 51.4. DRAINAGE AREA, 1,608 mi^2. Total capacity is 17,700 ft^3/s-day, of which 920 ft^3/s-day is controlled storage. Storage began Dec. 8, 1918.

Lakes and Reservoirs in Ohio River basin--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	03460242 Waterville Lake			03504500 Nantahala Lake			03507500 Thorpe Reservoir			03524500 Fontana Lake		
Sept. 30	2,249.60	11,400	-	2,860.98	48,400	-	3,085.51	25,600	-	1,653.16	467,800	-
Oct. 31	2,243.00	10,370	-1,030	2,852.68	43,200	-5,200	3,081.74	23,300	-2,300	1,639.44	419,200	-48,600
Nov. 30	2,241.80	10,340	-30	2,851.56	42,500	-700	3,075.29	19,600	-3,700	1,625.14	372,200	-47,000
Dec. 31	2,251.70	11,730	+1,390	2,857.04	45,900	+3,400	3,074.28	19,100	-500	1,617.52	348,400	-23,800
CAL YR 1984		-	+520		-	-7,700		-	-1,800		-	-73,100
Jan. 31	2,236.20	9,330	-2,400	2,849.95	41,600	-4,300	3,071.93	17,800	-1,300	1,607.59	319,600	-28,800
Feb. 28	2,234.80	9,120	-210	2,869.50	54,000	+12,400	3,078.44	21,300	+3,500	1,641.14	424,500	+104,900
Mar. 31	2,251.90	11,760	+2,640	2,870.20	54,500	+500	3,082.45	23,700	+2,400	1,644.80	436,200	+11,700
Apr. 30	2,248.30	11,190	-570	2,871.76	55,600	+1,100	3,086.60	26,300	+2,600	1,649.07	451,700	+15,500
May 31	2,253.10	11,950	+760	2,870.50	54,700	-900	3,086.02	25,900	-400	1,654.64	473,800	+22,100
June 30	2,256.80	12,550	+600	2,865.56	51,400	-3,300	3,083.07	24,100	-1,800	1,653.07	467,400	-6,400
July 31	2,253.40	12,000	-550	2,860.98	48,400	-3,000	3,079.03	21,700	-2,400	1,651.40	460,600	-6,800
Aug. 31	2,244.00	10,510	-1,480	2,861.50	48,700	+300	3,077.72	20,900	-800	1,644.13	434,000	-26,600
Sept. 30	2,246.10	10,850	+300	2,854.49	44,300	-4,400	3,073.38	18,600	-2,300	1,624.36	369,900	-64,100
WTR YR 1985		-	-580		-	-4,100		-	-7,000		-	-97,900

Date	Gage height (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)	Elevation (feet)	Contents (million cubic feet)	Change in contents (million cubic feet)
	03516500 Santeetlah Lake			03546500 Chatuge Lake			03554500 Hiwassee Lake			03555500 Apalachia Lake		
Sept. 30	1,792.06	48,300	-	1,917.50	88,500	-	1,503.29	154,100	-	1,277.33	27,600	-
Oct. 31	1,792.77	49,000	+700	1,915.23	82,600	-5,900	1,491.67	127,900	-26,500	1,276.80	27,300	-300
Nov. 30	1,789.26	45,400	-3,600	1,914.43	80,500	-2,100	1,484.40	114,100	-13,800	1,277.90	27,900	+600
Dec. 31	1,786.90	43,200	-2,200	1,913.34	77,700	-2,800	1,468.75	87,900	-26,200	1,277.53	27,700	-200
CAL YR 1984		-	+1,200		-	-6,600		-	-13,500		-	+600
Jan. 31	1,783.49	40,000	-3,200	1,910.70	71,400	-6,300	1,460.98	77,400	-10,500	1,274.36	25,900	-1,800
Feb. 28	1,797.45	54,000	+14,000	1,915.84	84,200	+12,800	1,476.74	100,700	+23,300	1,275.90	26,800	+900
Mar. 31	1,799.60	56,500	+2,500	1,916.18	85,100	+900	1,480.10	106,700	+6,000	1,276.10	26,900	+100
Apr. 30	1,800.86	57,900	+1,400	1,918.16	90,300	+5,200	1,484.73	114,700	+8,000	1,278.12	28,100	+1,200
May 31	1,802.00	59,100	+1,300	1,919.37	93,600	+3,300	1,490.45	126,400	+11,700	1,277.20	27,500	-600
June 30	1,802.35	59,700	+500	1,918.67	91,600	-2,000	1,494.43	133,700	+7,300	1,276.70	27,200	-300
July 31	1,797.69	54,300	-5,400	1,919.27	93,300	+1,700	1,492.95	130,500	-3,200	1,276.09	26,900	-300
Aug. 31	1,793.68	50,000	-4,300	1,918.09	90,100	-3,200	1,496.90	139,000	-8,500	1,276.37	27,000	+100
Sept. 30	1,789.05	45,200	-4,800	1,915.47	83,200	-6,900	1,482.14	110,100	-28,900	1,276.12	26,900	-100
WTR YR 1985		-	-3,100		-	-5,300		-	-44,000		-	-700

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to these events. Those measurements and others collected for some special reasons are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

					Annual Maximum		
Station No.	Station name	Location	Drainage area (mi2)	Period of record	Date	Gage height (feet)	Dis-charge (ft3/s)
02084148	Chicod Creek at Secondary Road 1565 near Grimesland, NC	Lat 35°31'57", long 77°11'13", Pitt County, at bridge on Secondary Road 1565, 2.0 miles upstream from mouth and 3.0 mi southwest of Grimesland.	19	1976-85	2-6-85	24.58	260
02084158	Cow Swamp near Grimesland, NC	Lat 35°32'00", long 77°13'30", Pitt County, at bridge on Secondary Road 1756, 1 mile upstream from mouth and 3.0 mi southwest of Grimesland.	17	1976-85	2-6-85	unknown	unknown

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

MEASUREMENTS AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		ROANOKE RIVER BASIN				
02070500 Mayo River	Dan River	Lat 36°32'05", long 79°59'30", Rockingham County, Hydrologic Unit 03010103, at bridge on Secondary Road 1358, 0.5 mi downstream from confluence of North and South Mayo Rivers, 0.8 mi downstream from Virginia-North Carolina State Line, and 4 mi west of Price.	261	1929-71†, 1981	7-29-85	354
02077348 Marlowe Creek	Dan River	Lat 36°29'03", long 78°58'47", Person County, Hydrologic Unit 03010104, at bridge on Secondary Road 1322, downstream from Fishing Branch, and 1.2 mi west of Woodsdale.	17.80	1970, 1974, 1976, 1978, 1980-84	5-28-85 7- 1-85 8-23-85	8.60 4.10 12.2
02079101 Grassy Creek	Roanoke River	Lat 36°29'22", long 78°37'08", Granville County, Hydrologic Unit 03010102, at bridge on Secondary Road 1436, 0.7 mi downstream from Little Grassy Creek, and 2.8 mi east-northeast of Cornwall.	61.2	1981-84	5-28-85 7- 3-85 8-22-85	7.24 1.81 55.0
0207920940 Gills Creek (formerly published as Island Creek)	Roanoke River	Lat 36°26'10", long 78°32'37", Granville County, Hydrologic Unit 03010102, at bridge on Secondary Road 1430, 0.3 mi downstream from Howlett Creek, and 1.7 mi southeast of Stovall.	13.80	1974-76, 1978-84	5-28-85 7- 3-85 8-22-85	1.55 0.30 1.54
02079264 Nutbush Creek	Roanoke River	Lat 36°22'10", long 78°24'31", Vance County, Hydrologic Unit 03010102, at bridge on Secondary Road 1317, 0.1 mi upstream from Buggs Island Reservoir, and 3 mi north of Henderson.	6.0	1970, 1974, 1976, 1978-84	5-28-85 7- 3-85 8-21-85	4.32 3.33 5.78
02079717 Smith Creek	Roanoke River	Lat 36°32'27", long 78°11'43", Warren County, Hydrologic Unit 03010106, at bridge on U.S. Highway 1, 0.3 mi downstream from Blue Mud Creek, and 2.1 mi west of Paschall.	52.9	1954, 1961-63, 1966, 1976, 1979-84	5-28-85 7- 3-85 8-21-85	11.3 22.4 19.3
02084148 Chicod Creek	Tar River	Lat 35°31'57", long 77°11'13", Pitt County, Hydrologic Unit 03020103, at bridge on Secondary Road 1565, 2 mi upstream from Cow Swamp, and 2.2 mi south of Grimesland.	19	1975-84	10- 4-84 11-13-84 12-18-84 2- 8-85 3-26-85 5- 8-85 6-19-85 7-25-85 9- 9-85	13.6 0.10 1.39 107 12.0 0 0 11.3 0
02084158 Cow Swamp	Tar River	Lat 35°31'57", long 77°11'13", Pitt County, Hydrologic Unit 03020103, at bridge on Secondary Road 1756, 1 mi upstream from mouth, and 3 mi southwest of Grimesland.	17	1975-79, 1981-84	10- 4-84 11-13-84 12-18-84 2- 8-85 3-26-85 5- 8-85 6-19-85 7-25-85 9- 9-85	8.78 1.40 3.27 55.7 8.72 0.41 0 0.89 1.14

† Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		NEUSE RIVER BASIN				
02087251 Crabtree Creek	Neuse River	Lat 35°50'15", long 78°46'52", Wake County, Hydrologic Unit 03020201, at bridge on Secondary Road 1795, 0.3 mi downstream from Hayleys Branch, and 3.5 mi north of Cary.	52.2	1983-84	12-13-84 2-14-85 3-25-85 7- 3-85 8-27-85	5.92 120 37.3 2.56 11.7
02087323 Crabtree Creek	Neuse River	Lat 35°48'47", long 78°37'40", Wake County, Hydrologic Unit 03020201, at 0.1 mi below Southern Coastline Railroad Bridge, and 0.7 mi above U.S. Highway 401.	120	1984	11- 1-84 12- 6-84 1-14-85 2- 1-85 2- 1-85 2- 4-85 3-11-85 5- 2-85 6- 5-85 8-22-85	17.4 278 36.4 2580 2640 365 49.0 24.7 22.7 20.3
0208732544 Pigeon House Creek	Crabtree Creek	Lat 35°47'37", long 78°38'35", Wake County, Hydrologic Unit 03020201, at Dortch Street, and 1.2 mi north of Post Office Building in Raleigh.	0.59	1984	10- 4-84 11- 1-84 12- 5-84 1-14-85 2-15-85 3-11-85 3-22-85 5- 2-85 7- 3-85 7-29-85 8-22-85 8-29-85	0.61 0.47 25.7 0.47 0.46 0.74 1.72 0.45 0.42 42.4 0.84 0.72
0208772185 Swift Creek	Neuse River	Lat 35°37'46", long 78°32'57", Johnston County, Hydrologic Unit 03020201, at State Highway 42, and 1.4 mi northeast of Drug Store.	86.6	1984	10- 3-84	24.6
02090634 Contentnea Creek	Neuse River	Lat 35°35'10", long 77°48'43", Wilson County, Hydrologic Unit 03020203, at bridge on State Highway 58, 0.6 mi upstream from Toisnot Swamp, and 1.5 mi southeast of Stantonsburg.	389	1969-70, 1972-74, 1978, 1980-84	12- 4-84	312
02091814 Neuse River	Atlantic Ocean	Lat 35°18'40", long 77°18'20", Craven County, Hydrologic Unit 03020202, at bridge on Secondary Road 1470, 1.5 mi upstream from Core Creek, and 2 mi east of Fort Barnwell.	a3900	1970, 1972-73, 1976, 1978, 1980-82	10- 3-84	2590
		CAPE FEAR RIVER BASIN				
02095091 South Buffalo Creek	Buffalo Creek	Lat 36°06'45", long 79°40'19", Guilford County, Hydrologic Unit 03030002, at bridge on Secondary Road 2821, 0.8 mi northwest of McLeansville, and 1.4 mi upstream from mouth.	43.5	1969-70, 1973, 1976-81, 1983-84	8- 1-85	34.7
02095681 Reedy Fork	Haw River	Lat 36°10'23", long 79°30'38", Alamance County, Hydrologic Unit 03030002, at bridge on State Highway 87, at Ossipee, and 0.5 mi upstream from mouth.	256	1969-70, 1973, 1976-84	7-31-85	315
02096879 Haw River	Cape Fear River	Lat 35°53'43", long 79°15'31", Alamance County, Hydrologic Unit 03030002, at bridge on Secondary Road 1005, 0.7 mi upstream from Cane Creek, and 5.8 mi north of Terrells.	1083	1974-75, 1979-84	7-30-85	1320
02097299 Third Fork Creek	New Hope River	Lat 35°54'38", long 78°57'39", Durham County, Hydrologic Unit 03030002, at bridge on State Highway 751, 0.9 mi upstream from mouth, and 1.6 mi north of Blands.	16.5	1970-71, 1974, 1976, 1978, 1980-84	12-13-84 1- 9-85 2-15-85 3-27-85 5- 9-85 6-18-85 7-30-85 8-23-85	0.88 5.17 12.2 6.50 0.97 0.91 6.50 5.77

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		CAPE FEAR RIVER BASIN (Continued)				
02097360 Bolin Creek	Little Creek	Lat 35°55'40", long 79°02'08", Orange County, Hydrologic Unit 03030002, at bridge on U.S. Highway 15A, 1.0 mi above Booker Creek, and 1.5 mi northeast of Chapel Hill.	10.7	1973, 1974-76, 1978, 1980-84	8-23-85	9.47
02097521 Morgan Creek	New Hope River	Lat 35°51'48", long 79°00'35", Chatham County, Hydrologic Unit 03030002, at bridge on Secondary Road 1726, 2 mi upstream from Cub Creek, and 4 mi north of Farrington.	45.6	1970, 1973, 1976, 1978, 1980-84	11-21-84 3-27-85 8-23-85	8.59 30.8 11.2
02099484 Richland Creek	Deep River	Lat 35°56'26", long 79°54'08", Guilford County, Hydrologic Unit 03030003, at bridge on Secondary Road 1147, 0.2 mi upstream from mouth, and 4 mi southwest of Groomtown.	16.2	1971, 1973-76, 1978-84	8- 7-85	15.5
02101001 Bear Creek	Deep River	Lat 35°26'26", long 79°35'20", Moore County, Hydrologic Unit 03030003, at bridge on State Highway 705, 0.5 mi north of Robbins, add 1 mi downstream from Cabin Creek.	139	1973-74	5-22-85 7- 9-85	40.5 22.5
02101800 Tick Creek	Rocky River	Lat 35°39'37", long 79°24'08", Chatham County, Hydrologic Unit 03030003, at bridge on U.S. Highway 421, 1 mi downstream of Atlantic and Yadkin Railway, and 1.5 mi east of Mount Vernon Springs.	15.5	1958-82†	9- 6-85	1.69
02102634 Upper Little River	Cape Fear River	Lat 35°19'33", long 78°43'26", Harnett County, Hydrologic Unit 03030004, at bridge on Secondary Road 2021, 1.5 mi upstream from mouth, and 2.8 mi west of Erwin.	217	1968, 1974-76, 1979	9- 6-85	41.3
02103000 Little River	Cape Fear River	Lat 35°11'38", long 78°59'14", Cumberland County, Hydrologic Unit 03030004, at bridge on State Highway 87, at Manchester, and 0.3 mi upstream from Tank Creek.	347	1939-50†, 1978, 1980-84	10- 3-84 7-31-85 9-13-85	287 1130 149
02104279 Rockfish Creek	Cape Fear River	Lat 34°58'10", long 79°06'40", Hoke County, Hydrologic Unit 03030004, at bridge on Secondary Road 1432, 0.2 mi downstream from Puppy Creek, and 1.2 mi northeast of Arabia.	a150	1973-74, 1978, 1980-84	10- 2-84 8- 1-85	205 288
02104380 Beaver Creek	Little Rockfish Creek	Lat 35°00'09", long 78°58'45", Cumberland County, Hydrologic Unit 03030004, at bridge on Secondary Road 1141 at Cumberland, and 1 mi upstream from mouth.	32.6	1961-65, 1968, 1973-75, 1979-84	10- 2-84 9-13-85	71.8 15.7
02104500 Rockfish Creek	Cape Fear River	Lat 34°57'57", long 78°55'00", Cumberland County, Hydrologic Unit 03030004, at bridge on U.S. Highway 301, 0.1 mi downstream from Little Rockfish Creek, and 1.7 mi east of Hope Mills.	292	1974-76, 1979-84	10- 2-84 8- 1-85 9-13-85	530 428 152
02105520 Harrisons Creek	Cape Fear River	Lat 34°43'55", long 78°42'59", Bladen County, Hydrologic Unit 03030005, at bridge on Secondary Road 1320, 1.2 mi upstream from mouth, and 1.2 mi south of White Oak.	50.1		9-17-85	12.0
0210563128 Turnbull Creek	Cape Fear River	Lat 34°33'49", long 78°33'26", Bladen County, Hydrologic Unit 03030005, at bridge on State Highway 41, 3.0 mi upstream from mouth, and 3.0 mi northeast of Elizabethtown.	81.4		9-17-85	6.24
02106681 Black River	South River	Lat 35°16'58", long 78°38'16", Harnett County, Hydrologic Unit 03030006, at bridge on Secondary Road 1780, 1.5 mi downstream from Pope's Pond, and 2.2 mi southwest of Dunn.	48.3	1973, 1977-84	10- 1-84	26.2

† Operated as a continuous-record gaging station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
02106760 Mingo Swamp	South River	Lat 35°16'18", long 78°35'11", Harnett County, Hydrologic Unit 03030006, at bridge on U.S. Highway 421, 1 mi downstream from Stony Run, and 2.7 mi southeast of Dunn.	50.4	1955, 1957-64, 1973, 1976, 1979-84	11-13-84	32.6
02108500 Rockfish Creek	Northeast Cape Fear River	Lat 34°44'32", long 78°02'22", Duplin County, Hydrologic Unit 03030007, on right bank at downstream side of bridge on State Highway 41, 1.5 mi upstream from Doctors Creek, and 2.5 mi west of Wallace.	69.3	1955-80†, 1981-84	10-24-84 4-10-85 9-25-85	13.4 15.9 3.21

WACCAMAW RIVER BASIN

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
02109821 Grissett Swamp	Seven Creeks	Lat 34°08'55", long 78°46'57", Columbus County, Hydrologic Unit 03040206, at bridge on Secondary Road 1005, 1 mi north of Iron Hill, and 2.8 mi upstream from Toms Fork.	21.8	1959, 1971-72, 1975-76, 1980-84	10-22-84	0.78

PEE DEE RIVER BASIN

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Date	Discharge (ft^3/s)
02115860 Muddy Creek	Yadkin River	Lat 36°00'01", long 80°20'25", Forsyth County, Hydrologic Unit 03040101, 100 ft upstream from bridge on Secondary Road 2995, 0.2 mi downstream from Salem Creek, and 1.8 mi east of Muddy Creek.	186	1964-84	8- 7-85	252
02121500 Abbotts Creek	Yadkin River	Lat 35°48'23", long 80°14'05", Davidson County, Hydrologic Unit 03040103, upstream from bridge on Secondary Road 1243, 1.5 mi southeast of Lexington, and 4.9 mi downstream from Rich Fork.	176	1940-57†, 1970-84	8- 8-85	19.8
02123500 Uwharrie River	Pee Dee River	Lat 35°25'47", long 80°01'05", Montgomery County, Hydrologic Unit 03040103, at State Highway 109, 1 mi upstream from McLeans Creek, and 3 mi south of Eldorado.	342	1938-71†, 1981-84	5-22-85 7- 9-85	103 70.7
02123567 Dutchmans Creek	Yadkin River	Lat 35°22'05", long 80°01'49", Montgomery County, Hydrologic Unit 03040103, at Secondary Road 1150, 1 mi upstream from mouth, and 3 mi southwest of Uwharrie.	3.44	1982-83†	5-22-85 7- 9-85	1.97 .94
02123881 Rocky River	Pee Dee River	Lat 35°28'29", long 80°46'48", Mecklenburg County, Hydrologic Unit 03040105, at bridge on Secondary Road 1608, 1.3 mi upstream from West Branch, and 4.2 mi southeast of Davidson.	13.4	1970-84	6- 5-85 8- 7-85 9-12-85	10.9 9.44 9.75
02124401 Rocky River	Pee Dee River	Lat 35°19'26", long 80°30'59", Cabarrus County, Hydrologic Unit 03040105, at bridge on U.S. Highway 601, 1 mi upstream from Hamby Branch, and 3 mi southeast of Faggarts Crossroads.	392	1970-71, 1973-84	5-24-85 7-11-85	164 101
02125126 Long Creek	Rocky River	Lat 35°13'05", long 80°15'28", Stanly County, Hydrologic Unit 03040105, at bridge on Secondary Road 1917, 1 mi upstream from mouth, and 4 mi east of Oakboro.	198	1970-71, 1973-84	5-23-85 7-11-85	79.2 24.3
02127318 Brown Creek	Pee Dee River	Lat 35°04'04", long 80°05'54", Anson County, Hydrologic Unit 03040104, at bridge on U.S. Highway 52, 0.9 mi downstream from Goulds Fork, and 4 mi north of Pinkston.	153		9-24-85	1.33
02129527 Jones Creek	Pee Dee River	Lat 34°54'15", long 79°55'51", Anson County, Hydrologic Unit 03040201, at bridge on State Highway 145, 3.1 mi southwest of Pee Dee, and 2.9 mi downstream from Hale Creek.	92.8		9-24-85	19.0

† Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		PEE DEE RIVER BASIN (Continued)				
02132269 Leith Creek	Little Pee Dee River	Lat 34°44'37", long 79°25'13", Scotland County, Hydrologic Unit 03040204, at bridge on Secondary Road 1609, 4 mi west of Maxton, and 5.4 mi upstream from mouth.	21.8	1973-75, 1979-84	3-13-85 5-23-85 7-10-85	10.6 1.58 0.65
02133624 Lumber River	Little Pee Dee River	Lat 34°46'22", long 79°19'55", Robeson County, Hydrologic Unit 03040203, at bridge on State Highway 71, 2.6 mi north of Maxton, and 7.5 mi upstream from Gum Swamp.	365	1974, 1980-84	9-18-85	296
02133691 Lumber River	Little Pee Dee River	Lat 34°38'30", long 79°10'49", Robeson County, Hydrologic Unit 03040203, at bridge on Secondary Road 1003, 2.2 mi southwest of Moss Neck, and 6.2 mi downstream from Gum Swamp.	432	1974-75, 1980-81, 1983-84	9-18-85	307
02134297 Big Marsh Swamp	Big Swamp	Lat 34°46'55", long 78°55'22", Robeson County, Hydrologic Unit 03040203, at bridge on Secondary Road 1924, 2.8 mi upstream from mouth, and 5.5 mi southeast of Oakland.	60.2	1973-75, 1978, 1980-84	10- 2-84 11-14-84	45.9 16.7
0213433855 Little Marsh Swamp	Calberry Swamp	Lat 34°49'07", long 78°55'46", Robeson County, Hydrologic Unit 03040203, at bridge on Secondary Road 1907, 2.6 mi northeast of St. Pauls.	42.9	1982-84	10- 2-84	56.1
02134495 Bryant Swamp	Big Swamp	Lat 34°32'20", long 78°49'22", Bladen County, Hydrologic Unit 03040203, at bridge on Secondary Road 1178, 0.4 mi upstream from Reedy Branch, and 2.3 mi southeast of Butters.	15.6	1966-67, 1973, 1975, 1978, 1980-84	10-22-84 12- 3-84	2.31 5.82
02134623 Lumber River	Little Pee Dee River	Lat 34°18'50", long 79°02'19", Columbus County, Hydrologic Unit 03040203, at bridge on State Highway 904 at Fairbluff, and 1.4 mi downstream from Poster Swamp.	1364	1959, 1962, 1968, 1974-75, 1980, 1984	7- 9-85	682
		SANTEE RIVER BASIN				
02137513 Catawba River	Santee River	Lat 35°38'23", long 82°07'38", McDowell County, Hydrologic Unit 03050101, at bridge on Interstate 40, 0.3 mi downstream from Brevard Creek, and 3.2 mi east of Old Fort.	57.9	1970-75, 1981-82, 1984	9- 4-85	71.0
02140304 Wilson Creek	Johns River	Lat 37°05'49", long 81°48'28", Avery County, Hydrologic Unit 03050101, at bridge on U.S. Highway 221, 0.8 mi upstream from Linn Core Branch, and 2.7 mi northwest of Gragg.	0.72	1964, 1969-70, 1978-81, 1983-84	9- 4-85	0.76
02143069 South Fork Catawba River	Catawba River	Lat 35°37'58", long 81°18'20", Catawba County, Hydrologic Unit 03050102, at bridge on State Highway 10, 1 mi downstream from Henry Fork, and 2.2 mi west of Startown.	210	1974-77, 1979-84	9- 5-85	234
02143260 Clark Creek	South Fork Catawba River	Lat 35°28'30", long 81°16'00", Lincoln County, Hydrologic Unit 03050102, at bridge on Secondary Road 1008 at Lincolnton, and 0.2 mi upstream from mouth.	91.2	1947, 1949-57, 1962-64, 1970-72, 1975, 1978-84	9- 5-85	56.9
02145640 Crowders Creek	Catawba River	Lat 35°08'15", long 81°08'15", York County, South Carolina, Hydrologic Unit 03050101, at bridge on Ridge Road, 3.4 mi upstream from Beaver Dam Creek, and 3.2 mi east-southeast of Bowling Green, South Carolina.	89	1970-77, 1979-84	9- 5-85	47.1

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985

SANTEE RIVER BASIN (Continued)

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
02146318 Sugar Creek	Catawba River	Lat 35°05'20", long 80°54'00", Mecklenburg County, Hydrologic Unit 03050103, at bridge on U.S. Highway 51, 0.5 mi upstream from McCullough Branch, and 0.8 mi west of Pineville.	65.3	1969-74, 1979-84	5-30-85	41.1
					7-23-85	41.9
					9-30-85	22.4
02146800 Sugar Creek	Catawba River	Lat 35°00'21", long 80°54'09", York County, Hydrologic Unit 03050103, at bridge on State Highway 160, 0.7 mi downstream from Clems Branch, and 2.6 mi east of Fort Mill, South Carolina.	262	1969, 1974-78†, 1982-84	10-29-84	104
					1-30-85	157
					3-28-85	159
					4-26-85	168
					5-30-85	143
					6-28-85	137
					8-30-85	199
					9-26-85	106
02147129 Waxhaw Creek	Catawba River	Lat 34°50'12", long 80°47'31", Union County, Hydrologic Unit 03050103, at bridge on Secondary Road 1103, 6 mi upstream from mouth, and 6.5 mi south of Waxhaw.	a37	1957, 1961-62, 1974-77, 1981-84	5-30-85	4.39
					6-28-85	1.50
					9-26-85	1.68
0215027770 Broad River	Santee River	Lat 35°12'57", long 81°47'28", Rutherford County, Hydrologic Unit 03050105, at bridge on U.S. Highway 221A, 1.2 mi upstream from confluence of Second Broad River, and 1.5 mi southwest of Cliffside.	627	1974-76, 1979-84	9-19-85	584
02152596 First Broad River	Broad River	Lat 35°13'03", long 81°36'28", Cleveland County, Hydrologic Unit 03050105, at bridge on Secondary Road 1140, 3 mi upstream from mouth, and 4.8 mi northwest of Earl.	296	1960-77, 1980-84	9-19-85	137
02153456 Buffalo Creek	Broad River	Lat 35°10'20", long 81°31'02", Cleveland County, Hydrologic Unit 03050105, at bridge on State Highway 198, 0.1 mi upstream from North Carolina-South Carolina State Line, and 4 mi west of Grover.	161	1960-77, 1979-84	9-19-85	54.0

SAVANNAH RIVER BASIN

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
02184242 Horsepasture River	Toxaway River	Lat 35°05'33", long 82°58'34", Transylvania County, Hydrologic Unit 03060101, at Secondary Road 1149, and 4 mi southwest of Lake Toxaway.	24.1		10-19-84	26.7
					8-28-85	95.3

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985, IN OHIO RIVER BASIN

KANAWHA RIVER BASIN

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
03160271 South Fork New River	New River	Lat 36°13'14", long 81°38'25", Watauga County, Hydrologic Unit 05050001, at bridge on U.S. Highway 421, and 2 mi east of Boone.	34.8	1925, 1955-56, 1960, 1962, 1974-84	9- 4-85	64.0
03162500 North Fork New River	New River	Lat 36°30'14", long 81°23'25", Ashe County, Hydrologic Unit 05050001, 0.2 mi downstream from bridge on State Highway 16 at Crumpler, and 6 mi upstream from South Fork.	277	1930-58†, 1977, 1981-84	8- 6-85	174
03162850 New River	Kanawha River	Lat 36°33'08", long 81°11'00", Alleghany County, Hydrologic Unit 05050001, at bridge on Secondary Road 1345, 0.8 mi downstream from Rock Creek, and 1.3 mi north-northeast of Amelia.	823	1968-69, 1971-75, 1979-84	10-10-84	632

TENNESSEE RIVER BASIN

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
03457124 Pigeon River	French Broad River	Lat 35°32'05", long 82°54'41", Haywood County, Hydrologic Unit 06010106, at bridge on Secondary Road 1818 at Clyde, and 0.2 mi downstream from Chambers Branch.	162	1969-78, 1980-84	8-29-85	222

† Operated as a continous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1985

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		TENNESSEE RIVER BASIN (Continued)				
03458121 Richland Creek	Pigeon River	Lat 35°30'30", long 82°58'19", Haywood County, Hydrologic Unit 06010106, at bridge on Secondary Road 1184, 0.8 mi upstream of Raccoon Creek, and 1.5 mi northeast of Waynesville.	48.0	1981-84	8-29-85	45.0
03460766 Pigeon River	French Broad River	Lat 35°46'32", long 83°06'01", Haywood County, Hydrologic Unit 06010106, at Carolina Power and Light power plant, downstream from Big Creek, and at Waterville.	536	1968-71, 1973-78, 1980-84	8-29-85	1980
03461976 North Toe River	Nolichucky River	Lat 35°58'51", long 82°00'59", Avery County, Hydrologic Unit 06010108, at bridge on U.S. Highway 19E, 0.1 mi downstream from Jones Creek, 0.7 mi north of Ingalls, and at mile 50.9.	74.1	1969-71, 1973-74, 1976-84	9-18-85	55.0
03463021 North Toe River	Nolichucky River	Lat 35°55'46", long 82°06'57", Mitchell County, Hydrologic Unit 06010108, at bridge on Secondary Road 1162 at Penland, 0.4 mi downstream from Bear Creek, and at mile 27.6	145	1969-70, 1972-75, 1978, 1982-84	9-18-85	95.1
03463162 South Toe River	Cane River	Lat 35°43'08", long 82°14'55", Yancey County, Hydrologic Unit 06010108, 3 mi southeast of Mt. Mitchell, and 4.7 mi southwest of Busick.	1.8		5-14-85 8-30-85	8.34 12.4
03464000 Cane River	Nolichucky River	Lat 36°00'52", long 82°19'40", Yancey County, Hydrologic Unit 06010108, 1.3 mi upstream from North Toe River, and 1.5 mi east of Sioux.	157	1933-71†, 1974-78, 1980-84	5-15-85 8-30-85	160 134
03464500 Nolichucky River	French Broad River	Lat 36°04'28", long 82°20'42", Mitchell County, Hydrologic Unit 06010108, at Poplar, and 0.7 mi upstream from Hollow Poplar Creek.	608	1922-45†, 1962-63, 1968-72, 1974-78, 1980-84	5-15-85 8-30-85	726 605
03478819 Watauga River	South Fork Holston River	Lat 36°11'39", long 81°44'45", Watauga County, Hydrologic Unit 06010103, at bridge on State Highway 105, 300 ft upstream from Laurel Fork, and 1.4 mi north of Shulls Mills.	26.6	1971-73, 1975	9- 4-85	29.9
03502000 Little Tennessee River	Tennessee River	Lat 35°13'59", long 83°23'32", Macon County, Hydrologic Unit 06010202, 0.2 mi upstream from State Highway 28 at Iotla, and 0.2 mi upstream from Iotla Creek.	323	1929-45†, 1972-79, 1982-84	9-19-85	275
03515633 Cheoah River	Little Tennessee River	Lat 35°20'04", long 83°48'21", Graham County, Hydrologic Unit 06010204, 0.1 mi upstream from Long Creek, and 0.9 mi north of Robbinsville.	55.3	1968-71, 1973-84	9-19-85	19.9

† Operated as a continuous-record gaging station.

BEAUFORT COUNTY

351932076480001. Local number, BC-13.
LOCATION.--Lat 35°19'32", long 76°48'00", Hydrologic Unit 03020104, near Aurora. Owner: North Carolina Phosphate Company.
AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 167 ft, drilled to 186 ft, cased to 186 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Elevation of land-surface datum is 10 ft. Measuring point: Top of casing, 0.36 ft below land-surface datum (since Feb. 16, 1984).
REMARKS.--Since 1965 water levels affected by nearby pumping associated with mining operations.
PERIOD OF RECORD.--June 1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.38 ft below land-surface datum, Apr. 9, 1965; lowest measured, 83.92 ft below land-surface datum, Apr. 21, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	72.32	71.50	72.51	73.32	72.72	73.40	72.48	71.92		
10		---	71.97	71.75	73.23	73.14	73.31	73.58	72.23	72.38		
15		72.76	72.19	71.59	73.34	72.75	73.39	73.76	72.37	71.47		
20		72.74	72.13	71.90	74.52	72.21	73.49	74.00	72.13	---		
25		73.06	72.13	72.29	73.83	71.57	72.79	72.45	72.12	---		
EOM		72.99	71.90	72.61	73.56	72.37	72.72	71.96	71.79	---		

WTR YR 1985 MEAN 72.60 HIGH 70.33 JUL 12 LOW 74.54 FEB 19

353314077041001. Local number, BC-14.
LOCATION.--Lat 35°33'14", long 77°04'10", Hydrologic Unit 03020104, at Washington. Owner: National Spinning Company.
AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 111 ft, drilled to 158 ft, gravel walled to 90 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 9.42 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, at land-surface datum.
REMARKS.--Water levels affected by pumping from nearby wells.
PERIOD OF RECORD.--May 1948 to November 1961, February 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.02 ft above land-surface datum, Apr. 10, 1964; lowest, 25.37 ft below land-surface datum, July 22, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.13	14.09	16.58	17.65	16.97	17.49	18.56	16.90	18.19	13.01	15.30	14.08
10	17.25	17.72	14.27	16.86	14.00	17.58	18.30	17.84	17.65	17.01	15.96	16.81
15	13.22	17.17	17.29	17.43	19.03	18.80	17.73	16.96	18.12	15.62	16.86	16.26
20	18.36	17.92	17.66	17.10	18.95	18.62	18.22	16.47	18.37	17.88	16.75	17.03
25	18.37	14.02	9.34	17.87	17.38	18.20	18.44	17.78	12.72	16.58	15.98	16.77
EOM	18.48	19.43	8.94	18.18	18.09	17.93	17.81	17.83	13.82	17.36	16.50	15.61

WTR YR 1985 MEAN 16.61 HIGH 8.94 DEC 31 LOW 19.95 NOV 29

353227076374001. Local number, BC-15.
LOCATION.--Lat 35°32'27", long 76°37'30", Hydrologic Unit 03020104, at Belhaven. Owner: City of Belhaven.
AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 246 ft, drilled to 260 ft, cased to 260 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Land-surface datum is 3.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 5.00 ft above land-surface datum.
PERIOD OF RECORD.--February 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.25 ft below land-surface datum, July 24, 1965; lowest, 14.87 ft below land-surface datum, Oct. 4, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Nov. 14	11.42	Feb. 7	11.47	May 7	11.10	June 19	11.52	July 24	11.66	Sept. 5	11.28
Dec. 18	11.33	Mar. 25	10.95								

BEAUFORT COUNTY--Continued

353343076371801. Local number, BC-75.
LOCATION.--Lat 35°33'43", long 76°37'18", Hydrologic Unit 03020104, near Belhaven. Owner: J. W. Younce.
AQUIFER.--Yorktown aquifer of Pliocene and Miocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 146 ft, cased to 120 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Elevation of land-surface datum is 3.8 ft. Measuring point: Top of casing, 2.00 ft above land-surface datum.
REMARKS.--Water levels affected by pumping from nearby municipal supply wells.
PERIOD OF RECORD.--September 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.39 ft below land-surface datum, Jan. 14-15, 1968; lowest, 14.65 ft below land-surface datum, Mar. 23, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.65	7.80	7.49	7.59	6.91	5.68	7.19	7.88	9.28	---	8.57	---
10	8.57	8.10	7.39	7.23	6.12	5.78	6.93	---	9.17	---	---	8.57
15	9.26	7.86	7.48	7.24	5.97	6.00	6.91	8.45	10.01	---	---	8.74
20	8.37	7.75	7.10	7.40	5.93	6.03	7.50	8.59	9.43	9.99	---	9.09
25	8.37	7.89	7.66	9.04	5.75	6.23	7.88	8.51	9.23	9.87	---	9.68
EOM	7.83	7.58	7.77	7.51	5.76	6.42	7.80	8.82	---	9.22	---	7.90

WTR YR 1985 MEAN 7.92 HIGH 5.68 MAR 4 AND OTHERS LOW 11.18 JUL 22

352615077083401. Local number, BC-137.
LOCATION.--Lat 35°26'15", long 77°08'34", Hydrologic Unit 03020202, near Wilmar. Owner: N.C. Department of Transportation.
AQUIFER.--Limestone of Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 142 ft, cased to 72 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Measuring point: Top of casing, 57.64 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--January 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.94 ft above NGVD, Feb. 3, 1972; lowest, 30.62 ft above NGVD, Nov. 18, 1983.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.06	34.14	33.38	33.50	34.09	35.03	34.78	33.76	31.99	30.79	31.39	32.85
10	34.21	33.96	33.37	33.42	34.19	35.00	34.57	33.52	31.73	30.69	31.82	32.87
15	34.34	33.77	33.35	33.54	34.53	34.96	34.62	33.26	31.39	30.68	32.01	32.64
20	34.33	33.64	33.44	33.69	34.71	34.92	34.42	32.93	31.29	30.66	32.29	32.55
25	34.21	33.50	33.38	33.80	34.87	34.92	34.27	32.71	31.05	30.86	32.52	32.46
EOM	34.12	33.46	33.40	33.94	34.91	34.87	33.98	32.32	30.88	31.12	32.79	32.59

WTR YR 1985 MEAN 33.25 HIGH 35.07 MAR 12 LOW 30.64 JUL 19

352615077083402. Local number, BC-138.
LOCATION.--Lat 35°26'15", long 77°08'34", Hydrologic Unit, 03020202, near Wilmar. Owner: N.C. Department of Transportation.
AQUIFER.--Unconfined fluvial deposits of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 12 ft, cased to 7 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Measuring point: Top of casing, 58.14 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--August 1971 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 57.56 ft above NGVD, Apr. 26-27, 1979; lowest, 51.11 ft above NGVD, Nov. 24-27, 1978.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	56.47	55.26	55.56	56.16	56.88	56.63	55.96	54.01	52.56	52.26	55.49	54.16
10	55.92	54.88	55.71	56.13	56.80	56.53	55.50	53.68	52.45	52.06	55.51	53.77
15	55.42	54.56	55.60	56.28	56.81	56.32	55.63	53.43	52.27	52.55	54.69	53.43
20	55.21	54.46	55.46	56.45	56.79	56.22	55.20	53.16	52.41	52.35	55.73	53.17
25	54.94	54.34	55.30	---	56.70	56.67	54.71	53.01	52.16	53.46	55.54	53.23
EOM	54.86	54.64	55.16	---	56.64	56.44	54.28	52.74	52.05	55.13	54.79	56.48

BEAUFORT COUNTY--Continued

352037076514101. Local Number, NC-145.
LOCATION.--Lat 35°20'37", long 76°51'41", Hydrologic Unit 03020104, near Bonnerton. Owner: NRCD (North Carolina Department of Natural Resources and Community Development). Well P18, V5.
AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 280 ft, Cased to 169 ft, open hole to 280 ft.
INSTRUMENTATION.--Digital Recorder --60-minute punch.
DATUM.--Land-surface datum is 36.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.47 ft above Land-surface datum.
REMARKS.--Water-level measurements made by NRCD personnel beginning June 2, 1980. U. S. Geological Survey continuous record began July 1, 1984.
PERIOD OF RECORD.--June 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 79.01 ft below land-surface datum, Sept. 14, 1984; lowest, 84.45 ft below land-surface datum, Sept. 19-20, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	81.04	80.52	81.75	80.93	81.05	81.42	79.84	81.11	81.47	82.40	82.26	84.00
10	82.04	81.49	81.69	81.12	81.45	81.35	80.32	81.25	81.35	82.80	81.89	84.11
15	81.98	81.79	81.77	81.03	81.52	81.10	80.38	81.62	81.58	82.21	81.73	84.40
20	80.59	81.95	81.50	81.07	82.33	80.74	80.65	82.00	81.36	82.46	81.80	84.45
25	79.38	82.02	81.48	81.39	81.99	79.93	80.81	81.65	81.92	82.47	81.64	84.30
EOM	80.74	81.94	81.25	81.29	81.75	79.74	80.88	81.36	81.92	82.34	83.56	82.64

WTR YR 1985 MEAN 81.62 HIGH 79.13 OCT 24 LOW 84.45 SEP 20

BERTIE COUNTY

355930076570001. Local number, NC-32.
LOCATION.--Lat 35°59'30", long 76°57'00", Hydrologic Unit 03010107, at Windsor. Owner: Town of Windsor.
AQUIFER.--Sand of Upper Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 334 ft, drilled to 360 ft, gravel walled.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 28.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 1.25 ft above land-surface datum (since May 22, 1979).
PERIOD OF RECORD.--June 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.22 ft below land-surface datum, Aug. 14, 1958; lowest, 37.36 ft below land-surface datum, Nov. 19, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.05	30.32	33.38	32.93	33.02	32.37	31.91	32.91	32.72	32.82	32.20	32.87
10	32.79	31.52	33.52	32.78	32.95	32.42	32.09	33.17	32.67	32.70	32.26	33.39
15	32.26	31.40	33.35	32.78	32.65	32.45	32.00	33.15	32.48	32.69	32.36	33.75
20	31.45	36.95	33.22	32.54	32.56	32.45	32.22	33.07	32.41	32.74	32.39	33.71
25	31.00	34.85	33.07	33.41	32.59	32.21	32.80	32.75	32.62	32.70	32.44	33.29
EOM	30.60	33.96	32.98	33.42	32.62	32.00	33.01	32.99	33.05	32.46	32.59	31.99

WTR YR 1985 MEAN 32.70 HIGH 30.32 NOV 5 LOW 36.98 NOV 19

BRUNSWICK COUNTY

335535078011001. Local number, BC-22.
LOCATION.--Lat 33°55'35", long 78°01'10", Hydrologic Unit 03030005, at Southport. Owner: Town of Southport.
AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 10 in, depth 161 ft, cased to 60 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 20.5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.27 ft above land-surface datum.
REMARKS.--Water levels affected by pumping from nearby municipal wells.
PERIOD OF RECORD.--February 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.14 ft below land-surface datum, Mar. 29, 1965; lowest, 31.90 ft below land-surface datum, Apr. 16, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.37	19.09	18.87	19.82	20.25	20.02	---	21.16	21.65	22.12	21.54	21.82
10	19.41	19.43	19.13	20.10	20.46	20.23	---	20.94	21.59	21.87	21.46	22.03
15	19.25	19.80	19.58	20.24	20.45	20.57	20.81	20.15	22.47	21.43	22.49	21.67
20	19.69	19.66	19.90	20.15	20.22	20.39	21.57	20.94	21.99	22.28	21.72	22.20
25	19.90	19.63	19.80	21.15	20.10	20.09	21.74	21.29	22.30	21.73	21.51	21.77
EOM	19.70	18.96	19.88	20.65	20.19	---	21.14	21.38	22.54	22.01	21.49	20.84

WTR YR 1985 MEAN 20.74 HIGH 18.74 DEC 6 LOW 22.92 JUN 28

CARTERET COUNTY

344323076451301. Local number, NC-139.
LOCATION.--Lat 34°43'23", long 76°45'13", Hydrologic Unit 03020106, at Morehead City. Owner: North Carolina Department of Natural Resources and Community Development.
AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 192 ft, cased to 180 ft.
INSTRUMENTATION.--Digital recorder --30-minute punch.
DATUM.--Land-surface datum is 8.72 ft above National Geodetic Vertical Datum of 1929 (levels by N.C. Department of Natural Resources and Community Development). Measuring point: Top of casing, 1.73 ft above land-surface datum.
PERIOD OF RECORD.--January 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.23 ft below land-surface datum, Dec. 7, 1976; lowest, 12.14 ft below land-surface datum, Aug. 17, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.44	7.75	8.14	7.43	8.11	7.58	7.61	8.51	9.75	10.70	10.75	10.97
10	8.24	7.97	8.22	7.69	8.52	8.19	8.03	8.63	9.93	10.83	10.73	11.02
15	7.59	7.95	8.02	7.53	8.17	7.96	8.02	8.70	10.32	11.04	11.50	10.71
20	8.16	7.83	7.65	7.25	8.26	7.89	8.40	8.87	10.29	11.04	11.30	10.75
25	8.32	7.99	7.69	8.18	8.37	7.66	8.51	9.02	10.45	11.18	10.93	10.35
EOM	8.39	8.18	7.69	8.47	7.95	7.78	8.72	8.89	10.32	10.92	10.95	9.90

WTR YR 1985 MEAN 8.97 HIGH 7.08 JAN 18 LOW 11.59 AUG 17

CHOWAN COUNTY

361842076364001. Local number, NC-31
LOCATION.--Lat 36°18'42", long 76°36'40", Hydrologic Unit 03010203,-near Gliden. Owner: U. S. Geological Survey.
AQUIFER.--Pungo River aquifer of Miocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 240 ft, cased to 232 ft, screened from 232 ft to 242 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Land-surface datum is 37.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.05 ft above land-surface datum.
PERIOD OF RECORD.--October 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.12 ft below land-surface datum, Feb. 25, 1965; lowest measured, 20.37 ft below land-surface datum, Aug. 14, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 23	19.95	Jan. 17	19.82	Apr. 10	19.90	May 20	20.08	July 10	20.24	Aug. 14	20.37
Dec. 6	19.77	Feb. 26	19.72								

361427076393001. Local number, NC-58.
LOCATION.--Lat 36°14'27", long 76°39'30", Hydrologic Unit 03010203, Chowan County High School, near Icaria. Owner: Chowan County Board of Education.
AQUIFER.--Beaufort aquifer of Paleocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 310 ft, reported cased to 320 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Land-surface datum is 26.58 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.90 ft above land-surface datum.
PERIOD OF RECORD.--June 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.91 ft below land-surface datum, Mar. 13, 1957; lowest measured, 13.69 ft below land-surface datum, Feb. 17, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 23	12.92	Jan. 17	12.08	Apr. 10	13.01	May 20	13.16	July 10	13.36	Aug. 14	13.42
Dec. 6	12.89	Feb. 26	12.95								

CHOWAN COUNTY--Continued

361350076392701. Local number, NC-78.
LOCATION.--Lat 36°13'50", long 76°39'27", Hydrologic Unit 03010203, near Tyner. Owner: R. H. Hollowell.
AQUIFER.--Sand of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Dug observation well, diameter 36 in, depth 14 ft, dug to 16 ft, lined with concrete.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Elevation of land-surface datum is 30 ft. Measuring point: Top of instrument shelf, 2.35 ft above land-surface datum.
PERIOD OF RECORD.--June 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.01 ft above land-surface datum, Mar. 18, 1980 and Sept. 27, 1985; lowest, 7.24 ft below land-surface datum, Sept. 29-30, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.34	6.27	6.46	1.64	.81	1.59	3.91	5.55	6.31	6.05	2.15	5.40
10	4.77	6.43	6.16	3.92	1.22	2.32	4.27	5.79	5.76	6.21	2.36	5.78
15	5.17	6.59	6.27	4.02	1.12	3.04	4.46	5.75	5.50	5.80	4.20	6.14
20	5.51	6.72	6.39	2.81	1.29	3.62	4.59	5.88	4.03	5.90	4.11	6.44
25	5.79	6.86	6.53	3.87	1.55	1.89	4.92	6.08	4.91	5.91	4.63	5.59
EOM	6.07	6.81	6.71	1.89	1.61	3.09	5.26	6.36	5.60	3.56	5.07	1.21

WTR YR 1985 MEAN 4.62 HIGH .40 SEP 27 LOW 6.91 NOV 27 AND OTHERS

CRAVEN COUNTY

352309077102901. Local number, NC-16.
LOCATION.--Lat 35°23'09", long 77°10'29", Hydrologic Unit 03020202, near Wilmar. Owner: U. S. Geological Survey (formerly W. L. Elks).
AQUIFER.--Peedee aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 322 ft, cased to 300 ft, screened from 300 to 320 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 49 ft. Measuring point: Top of casing, 0.30 ft above land-surface datum.
PERIOD OF RECORD.--November 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.01 ft below land-surface datum, Aug. 23, 1966; lowest measured, 27.33 ft below land-surface datum, Aug. 7, 1985.

WATER LEVERL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 3	26.65	Dec. 18	26.93	Mar. 19	27.03	Apr. 30	27.12	June 12	27.30	Aug. 7	27.33
Nov. 14	26.95										

351049077175501. Local number, NC-44.
LOCATION.--Lat 35°10'49", long 77°17'55", Hydrologic Unit 03020202, at Cove City. Owner: City of New Bern.
AQUIFER.--Upper Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 854 ft, multi-screened. Screened intervals: 705-715 ft, 781-786 ft, 828-833 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 36.73 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 2.06 ft above land-surface datum.
REMARKS.--Water levels affected by nearby pumping.
PERIOD OF RECORD.--March 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.01 ft below land-surface datum, Aug. 25, 26, 1965; lowest, 101.28 ft below land-surface datum, June 28, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.06	90.58	91.18	89.10	91.31	91.08	95.82	95.29	98.29	99.28	97.07	99.61
10	90.08	91.25	90.89	89.26	92.51	92.43	96.39	95.64	98.77	99.80	97.14	98.91
15	89.83	91.10	89.81	89.30	91.61	96.78	96.32	96.66	99.36	96.06	98.80	99.12
20	89.98	91.19	89.76	89.35	90.73	92.69	96.62	96.38	97.92	96.63	99.50	99.03
25	90.26	89.92	89.39	91.38	---	94.58	97.59	98.14	100.17	99.15	99.18	98.62
EOM	90.15	89.86	89.29	90.81	---	95.46	98.13	98.52	99.00	95.91	98.81	98.31

WTR YR 1985 MEAN 94.55 HIGH 89.10 JAN 5 AND OTHERS LOW 100.64 JUN 28

CRAVEN COUNTY--Continued

350904077130601. Local number, NC-48.

LOCATION.--Lat 35°09'04", long 77°13'06", Hydrologic Unit 03020202, at Tuscarora. Owner: International Paper Company.

AQUIFER.--Sand of Peedee aquifer of late Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 310 ft.

INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 38 ft. Measuring point: Top of casing, 2.60 ft above land-surface datum.

REMARKS.--Continuous record ended May 15, 1984. Periodic measurements began May 16, 1984.

PERIOD OF RECORD.--November 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.55 ft above land-surface datum, June 24, 1963; lowest measured, 12.53 ft below land-surface datum, June 11, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 4	11.30	Dec. 17	11.50	Mar. 18	11.56	June 11	12.53	July 1	12.20	Aug. 6	12.08
Nov. 14	11.53	Jan. 31	10.39	Apr. 29	10.76						

DAVIE COUNTY

355359080331701. Local number, NC-142.

LOCATION.--Lat 35°53'59", long 80°33'17", Hydrologic Unit 03040102, at Mocksville. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined weathered granite of Paleozoic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 30.8 ft, cased to 30.8 ft, gravel filled from 20.0 ft to 30.8 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 835 ft from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Well replaces nearby NC-110.

PERIOD OF RECORD.--October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.01 ft below land-surface datum, Apr. 14, 1984; lowest, 20.98 ft below land-surface datum, Oct. 24-26, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	18.50	18.84	19.03	18.62	17.52	18.03	18.52	18.55	19.05	19.33	18.26
2	---	18.50	18.86	19.05	18.31	17.54	18.05	18.53	18.60	19.05	19.37	18.23
3	---	18.54	18.84	19.03	18.19	17.60	18.05	18.55	18.62	19.06	19.38	18.23
4	---	18.52	18.88	18.87	18.11	17.56	18.09	18.59	18.63	19.07	19.39	18.24
5	---	18.52	18.84	18.80	17.99	17.58	18.10	18.59	18.64	19.09	19.39	18.26
6	---	18.57	18.80	18.76	17.88	17.67	18.13	18.60	18.65	19.12	19.40	18.29
7	---	18.61	18.85	18.67	17.84	17.68	18.16	18.62	18.63	19.14	19.39	18.32
8	---	18.61	18.83	18.68	17.82	17.63	18.18	18.63	18.62	19.16	19.36	18.34
9	---	18.60	18.85	18.71	17.79	17.66	18.22	18.64	18.60	19.17	19.36	18.35
10	---	18.58	18.83	18.69	17.77	17.69	18.24	18.65	18.61	19.20	19.35	18.38
11	---	18.59	18.85	18.67	17.71	17.67	18.25	18.66	18.61	19.23	19.34	18.43
12	---	---	18.85	18.70	17.58	17.67	18.28	18.65	18.60	19.25	19.33	18.49
13	---	---	18.89	18.68	17.57	17.73	18.28	18.64	18.63	19.25	19.34	18.54
14	---	---	18.92	18.64	17.52	17.74	18.28	18.63	18.64	19.25	19.38	18.58
15	---	---	18.92	18.63	17.50	17.80	18.27	18.61	18.65	19.24	19.40	18.59
16	---	---	18.92	18.63	17.51	17.80	18.30	18.55	18.64	19.24	19.43	18.60
17	---	---	18.92	18.64	17.54	17.77	18.34	18.38	18.63	19.26	19.39	18.63
18	---	---	18.92	18.68	17.57	17.87	18.35	18.34	18.62	19.28	19.39	18.67
19	---	---	18.92	18.70	17.52	17.91	18.34	18.34	18.64	19.29	19.39	18.69
20	---	---	18.94	18.75	17.57	17.91	18.36	18.34	18.72	19.30	19.41	18.71
21	---	---	18.95	18.79	17.62	17.93	18.38	18.33	18.84	19.32	18.69	18.74
22	---	---	18.95	18.79	17.62	17.85	18.39	18.33	18.86	19.34	18.63	18.78
23	---	---	18.98	18.80	17.61	17.88	18.40	18.32	18.88	19.36	18.63	18.82
24	---	---	18.96	18.79	17.61	17.88	18.41	18.34	18.90	19.36	18.67	18.84
25	---	---	19.01	18.80	17.65	17.96	18.42	18.36	18.92	19.33	18.80	18.86
26	18.43	18.78	19.03	18.88	17.62	17.99	18.45	18.39	18.95	19.35	18.75	18.89
27	18.44	18.80	19.01	18.85	17.58	17.94	18.46	18.41	18.98	19.35	18.70	18.93
28	18.45	18.76	19.00	18.83	17.58	17.94	18.47	18.43	19.01	19.37	18.58	19.02
29	18.46	18.80	19.01	18.87	---	17.97	18.51	18.48	19.03	19.35	18.47	19.05
30	18.48	18.80	19.03	18.87	---	17.99	18.52	18.52	19.04	19.34	18.35	19.08
31	18.50	---	19.04	18.83	---	18.00	---	18.52	---	19.34	18.28	---
MEAN	---	---	18.92	18.78	17.74	17.78	18.29	18.50	18.73	19.24	19.10	18.59

WTR YR 1985 MEAN 18.58 HIGH 17.50 LOW 19.43

DUPLIN COUNTY

350030078060001. Local number, NC-69.
LOCATION.--Lat 35°00'05", long 78°05'55", Hydrologic Unit 03030006, at Warsaw. Owner: City of Warsaw.
AQUIFER.--Peedee aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 10 in, depth 102 ft, believed cased to 102 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Elevation of land-surface datum is 145 ft. Measuring point: Top of casing, 1.00 ft above land-surface datum.
REMARKS.--Water levels affected by intermittent pumping from nearby municipal wells.
PERIOD OF RECORD.--January 1963 to October 1964, January 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.69 ft below land-surface datum, Feb. 23, 1967; lowest, 49.89 ft below land-surface datum, Aug. 23, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.73	45.63	45.75	46.10	46.63	46.22	45.73	45.61	46.14	46.85	47.08	47.50
10	45.99	45.64	45.73	46.24	46.36	45.73	46.73	45.75	47.12	46.90	47.39	47.13
15	46.59	45.71	45.76	47.08	46.00	45.62	45.93	45.77	46.77	47.00	47.45	47.50
20	45.84	45.71	45.71	46.59	46.08	45.65	45.89	45.86	46.85	47.11	47.90	47.21
25	45.83	45.73	45.77	46.86	46.27	46.18	45.95	46.11	47.21	47.09	47.88	47.09
EOM	45.87	45.79	46.37	46.55	45.85	46.19	---	46.06	46.91	47.27	47.37	47.87

WTR YR 1985 MEAN 46.41 HIGH 45.54 MAR 23 LOW 48.15 AUG 12

345825077592101. Local number, DU-107.
LOCATION.--Lat 34°58'25", long 77°59'21", Hydrologic Unit 03030007, 50 ft northwest of Grove Creek on Secondary Road 1376 near Kenansville. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 7.27 ft, cased to 4.27 ft, screened from 4.27 ft to 7.27 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 85.93 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--October 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 82.30 ft above NGVD, June 8, 1983; lowest, 78.21 above NGVD, July 10,1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	79.60	79.62	80.00	80.33	80.53	79.97	79.65	79.10	78.72	78.35	79.60	79.00
10	79.37	79.45	79.93	79.94	80.22	79.80	79.54	79.11	78.96	78.29	80.04	78.83
15	79.27	79.33	79.74	79.89	80.40	79.67	79.67	79.07	78.67	78.74	79.21	78.73
20	79.39	79.36	79.68	80.06	80.26	79.82	79.67	78.94	78.71	78.78	80.55	78.67
25	79.29	79.36	79.62	79.87	80.08	80.32	79.37	79.14	78.50	80.05	79.64	78.87
EOM	79.60	79.68	79.58	80.35	80.00	79.86	79.12	78.88	78.45	79.93	79.35	79.37

WTR YR 1985 MEAN 79.50 HIGH 80.96 FEB 6 LOW 78.29 JUL 10

345818077592501. Local number, DU-109.
LOCATION.--Lat 34°58'18", long 77°59'25", Hydrologic Unit 03030007, 300 ft northwest of Grove Creek on Secondary Road 1376 near Kenansville. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 5.79 ft, cased to 3.79 ft, screened from 3.79 ft to 5.79 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 84.45 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--October 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 82.07 ft above NGVD, June 8, 1983; lowest, 80.12 ft above NGVD, July 10, 11, 1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	81.17	81.15	81.20	e81.50	e81.58	81.32	81.28	81.10	80.68	80.25	81.12	80.97
10	81.12	81.13	e81.27	e81.55	81.38	81.30	81.24	81.09	80.93	80.15	81.22	80.82
15	81.06	81.11	e81.25	e81.52	81.41	81.28	81.26	81.11	80.72	80.63	81.06	80.72
20	81.09	81.12	e81.20	e81.45	81.34	81.27	81.25	81.01	80.71	80.73	81.29	80.67
25	81.08	81.13	e81.21	e81.35	81.34	81.36	81.20	81.02	80.56	81.14	81.18	80.96
EOM	81.13	81.16	e81.30	e81.52	81.32	81.32	81.12	80.81	80.30	81.22	81.09	81.06

WTR YR 1985 MEAN 81.10 HIGH 81.60 FEB 6 LOW 80.13 JUL 11
e Estimated

345815077573301. Local number, DU-111.
LOCATION.--Lat 34°58'15", long 77°57'33", Hydrologic Unit 03030007, 50 ft southwest of Grove Creek on State Highway 11 at Kenansville. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 5.84 ft, cased to 3.84 ft, screened from 3.84 ft to 5.84 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 70.97 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--October 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 68.42 ft above NGVD Feb. 14, 15, 1983; lowest, 64.20 ft above NGVD, July 5, 1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	66.59	66.42	66.45	66.49	66.85	66.65	66.47	65.94	64.99	64.24	66.27	66.16
10	66.45	66.38	66.55	66.50	67.01	66.54	66.39	65.86	65.14	64.36	66.27	65.84
15	66.33	66.34	66.50	66.52	67.11	66.47	66.35	65.87	65.09	64.58	66.18	65.40
20	66.32	66.32	66.45	66.50	66.88	66.48	66.35	65.69	65.00	65.10	66.33	65.02
25	66.32	66.32	66.42	66.52	66.80	66.65	66.21	65.74	64.70	65.34	66.41	65.11
EOM	66.40	66.38	66.38	66.51	66.72	66.61	66.05	65.62	64.46	66.03	66.32	65.57

WTR YR 1985 MEAN 66.08 HIGH 67.12 FEB 14 LOW 64.24 JUL 5

345810077573401. Local number, DU-113.
LOCATION.--Lat 34°58'10", long 77°57'34", Hydrologic Unit 03030007, 380 ft southwest of Grove Creek on State Highway 11 at Kenansville. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 8.42 ft, cased to 5.42 ft, screened from 5.42 ft to 8.42 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 70.32 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--October 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.11 ft above NGVD, Mar. 19, 1983; lowest, 63.90 ft above NGVD, July 5, 1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	66.91	66.81	66.92	67.17	67.40	67.09	66.87	66.24	e65.35	64.05	66.60	66.07
10	66.73	66.74	66.99	66.96	67.47	67.00	66.77	66.02	e65.20	64.19	66.74	65.66
15	66.59	66.68	66.89	66.96	67.65	66.93	66.75	66.25	e65.15	e64.85	66.20	65.23
20	66.69	66.70	66.84	67.09	67.29	66.96	66.79	e65.80	e65.05	e65.55	67.50	64.90
25	66.65	66.68	66.79	66.95	67.20	67.30	66.60	e65.90	e64.85	66.65	66.63	65.47
EOM	66.96	66.95	66.76	67.03	67.14	67.03	66.36	e65.75	e64.40	66.90	66.42	66.48

WTR YR 1985 MEAN 66.44 HIGH 67.80 FEB 13 LOW 64.05 JUL 5
e Estimated

345826077571401. Local number, DU-116.
LOCATION.--Lat 34°58'26", long 77°57'14", Hydrologic Unit 03030007, 150 ft northwest of Buckskin Creek on State Highway 11 at Kenansville. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 5.30 ft, cased to 3.30 ft, screened from 3.30 ft to 5.30 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 74.29 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--October 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.67 ft above NGVD, June 8, 1983; lowest, 68.04 ft above NGVD, July 5, 14, 1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	70.74	70.59	70.86	71.50	71.80	71.41	70.67	70.01	68.77	68.13	70.96	e70.55
10	70.44	70.34	71.21	71.23	71.58	71.22	70.49	69.80	68.84	68.27	70.75	e69.95
15	70.23	70.22	70.89	71.29	71.63	70.74	70.66	69.92	68.60	69.33	70.12	e69.50
20	70.33	70.36	70.75	71.49	71.65	71.07	70.43	69.56	68.54	68.66	71.42	e69.20
25	70.22	70.28	70.62	71.31	71.49	71.72	70.18	69.47	68.36	70.85	e71.15	e70.00
EOM	70.60	70.49	70.54	71.66	71.43	71.26	69.95	69.06	68.17	71.31	e70.84	e71.05

WTR YR 1985 MEAN 70.39 HIGH 72.02 FEB 6 LOW 68.08 JUL 4
e Estimated

DUPLIN COUNTY--Continued

345825077571701. Local number, DU-117.
LOCATION.--Lat 34°58'25", long 77°57'17", Hydrologic Unit 03030007, 50 ft southwest of Buckskin Creek on State Highway 11 at Kenansville. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 5.25 ft, cased to 3.25 ft, screened from 3.25 ft to 5.25 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 76.26 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--October 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.15 ft above NGVD, June 8, 1983; lowest, 68.57 ft above NGVD, Aug. 31, 1983.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.06	72.14	72.21	72.20	72.34	72.21	72.13	71.38	70.49	69.10	71.99	e71.20
10	71.82	71.93	72.16	72.24	72.26	72.18	72.07	71.03	69.84	68.95	72.01	e70.75
15	71.59	71.79	72.14	72.19	72.27	72.15	72.18	71.18	70.50	69.99	71.29	e70.35
20	71.74	72.05	72.12	72.21	72.32	72.19	72.02	70.50	71.65	69.61	72.07	e70.00
25	71.74	71.98	72.11	72.20	72.28	72.31	71.60	70.43	69.94	71.38	e71.80	e70.60
EOM	72.09	72.10	72.12	72.32	72.22	72.20	71.26	69.93	69.31	72.10	e71.50	e71.65

WTR YR 1985 MEAN 71.53 HIGH 72.42 FEB 12 LOW 68.95 JUL 10
e Estimated

350135078004101. Local number, DU-122.
LOCATION.--Lat 35°01'35", long 78°00'41", Hydrologic Unit 03030007, 65 ft south of Nahunga Creek on Secondary Road 1301 near Warsaw. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 6.00 ft, cased to 2.00 ft, screened from 2.00 ft to 6.00 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 95.98 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--May 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.24 ft above NGVD, June 8, 1983; lowest, 87.61 ft above NGVD, July 24, 1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	91.06	91.02	91.16	91.30	91.42	91.17	90.96	90.62	89.49	88.11	90.53	90.20
10	90.93	90.88	91.09	91.09	91.30	91.12	90.93	90.47	90.55	87.90	90.56	89.76
15	90.80	90.83	91.03	91.08	91.62	91.05	91.06	90.39	89.83	87.71	90.56	89.42
20	90.98	90.93	90.99	91.13	91.34	91.09	90.88	90.05	89.59	87.79	89.98	89.01
25	90.81	91.02	90.96	91.09	91.21	91.50	90.58	90.74	88.88	89.38	91.39	90.12
EOM	91.04	91.13	90.96	91.23	91.18	91.05	90.40	90.11	88.38	90.57	90.80	90.55

WTR YR 1985 MEAN 90.55 HIGH 92.72 AUG 19 LOW 87.64 JUL 23

350133078004001. Local number, DU-124.
LOCATION.--Lat 35°01'33", long 78°00'40", Hydrologic Unit 03030007, 300 ft south of Nahunga Creek on Secondary Road 1301 near Warsaw. Owner: U.S.. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 5.38 ft, cased to 3.38 ft, screened from 3.38 ft to 5.38 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 99.84 ft above National Geodetic Vertical Datum of 1929.
PERIOD OF RECORD.--October 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 98.64 ft above NGVD, Feb. 6, 7, 10, 11, 12, 14, 15, 1983; lowest, 95.24 ft above NGVD, July 15, 1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.15	97.19	97.24	97.30	97.32	97.25	97.27	e97.18	96.94	95.95	97.28	97.16
10	97.11	97.17	97.25	97.23	97.30	97.25	97.24	e97.15	97.15	95.49	97.23	97.04
15	97.10	97.17	97.21	97.22	97.29	97.25	e97.26	e97.17	97.02	95.25	97.04	96.90
20	97.14	97.18	97.23	97.24	97.24	97.29	e97.26	97.12	96.60	95.75	97.20	96.80
25	97.15	97.18	97.21	97.19	97.24	97.37	e97.24	97.20	96.35	95.83	97.30	97.01
EOM	97.20	97.22	97.20	97.24	97.22	97.31	e97.20	97.18	96.20	97.21	97.25	97.22

WTR YR 1985 MEAN 97.05 HIGH 97.39 FEB 6 LOW 95.25 JUL 15 AND OTHERS
e Estimated

EDGECOMBE COUNTY

355845077264501. Local number, NC-72.
LOCATION.--Lat 35°58'15", long 77°26'38", Hydrologic Unit 03020102, at Speed. Owner: Melvin Howell.
AQUIFER.--Sands of Upper Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 94 ft, drilled to 100 ft, cased to 95 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 54.51 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.90 ft above land-surface datum (since Feb. 3, 1972).
PERIOD OF RECORD.--March 1946 to May 1965, April 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.17 ft below land-surface datum, Sept. 27, 1955; lowest measured, 12.16 ft below land-surface datum, June 11, 1953 and Aug. 28, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.32	9.78	10.09	9.91	9.16	8.70	9.51	10.24	11.38	11.81	10.91	11.22
10	9.43	9.87	10.09	9.86	9.03	8.85	9.56	10.38	11.06	12.11	10.70	11.22
15	9.56	9.98	10.01	9.70	8.77	8.82	9.49	10.40	11.02	11.71	10.81	11.33
20	9.51	10.07	10.04	9.63	8.82	8.99	9.54	10.53	11.00	11.78	10.79	11.30
25	9.79	10.25	10.20	9.77	8.84	8.95	10.03	10.64	11.39	11.70	10.89	11.20
EOM	9.74	10.14	10.18	9.43	8.83	9.03	10.39	10.82	11.67	11.07	11.13	10.90

WTR YR 1985 MEAN 10.20 HIGH 8.70 MAR 5 LOW 12.11 JUL 10

GATES COUNTY

362044076362301. Local number, NC-30.
LOCATION.--Lat 36°20'44", long 76°36'23", Hydrologic Unit 03010203, at Hobbsville. Owner: Mrs. T. W. Blanchard.
AQUIFER.--Black Creek aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 460 ft. Believed cased to 494 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM--Land-surface datum is 38.16 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.50 ft above land-surface datum.
PERIOD OF RECORD.--November 1961 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.40 ft below land-surface datum, Mar. 8, 1962; lowest measured, 26.75 ft below land-surface datum, July 10, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 23	25.32	Jan. 17	25.11	Apr. 10	25.39	May 20	25.52	July 10	26.75	Aug. 14	25.66
Dec. 6	25.19	Feb. 26	25.19								

362751076484701. Local number, NC-54.
LOCATION.--Lat 36°27'51", long 76°48'47", Hydrologic Unit 03010203, at Reduco. Owner: James Wright.
AQUIFER.--Black Creek aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 231 ft, cased to 217 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 37.35 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 1.28 ft above land-surface datum (since Mar. 26, 1979).
PERIOD OF RECORD.--November 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.84 ft below land-surface datum, Mar. 5, 1966; lowest, 20.26 ft below land-surface datum, Jan. 1, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.72	18.66	18.52	18.42	18.64	18.46	18.56	18.83	19.04	19.12	18.90	19.18
10	18.59	18.72	18.52	18.65	18.79	18.49	18.70	18.82	18.91	19.25	18.95	19.52
15	18.52	18.75	18.61	18.51	18.59	18.49	18.53	18.99	18.93	18.95	19.02	19.74
20	18.62	18.79	18.51	18.46	18.59	18.51	18.81	18.99	18.86	19.27	18.98	19.65
25	18.53	18.78	18.57	19.18	18.52	18.35	18.78	18.85	19.01	19.17	19.10	19.49
EOM	18.60	18.66	18.61	18.82	18.47	18.54	18.88	18.98	19.03	18.89	19.10	19.05

WTR YR 1985 MEAN 18.81 HIGH 18.35 MAR 25 LOW 19.74 SEP 15

HAYWOOD COUNTY

352315082484401. Local number, HC-40.
LOCATION.--Lat 35°23'15", long 82°48'44", Hydrologic Unit 06010106, near Cruso. Owner: Champion Paper and Fiber Company.
AQUIFER.--Unconfined phyllitic rock of the Snowbird Group of Precambrian age.
WELL CHARACTERISTICS.--Dug observation well, diameter 12 in, depth 19 ft, cased to 19 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 3,148.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--December 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.24 ft below land-surface datum, Mar. 12, 1977; lowest, 6.65 ft below land-surface datum, Sept. 20-21, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.12	5.62	5.51	5.55	5.38	5.53	5.46	5.49	5.89	6.08	5.95	6.37
10	6.26	5.78	5.67	5.82	5.66	5.55	5.37	5.47	5.85	6.15	6.19	6.46
15	6.11	5.68	5.89	5.96	4.96	5.55	5.13	5.48	5.95	6.17	6.44	6.52
20	6.24	5.79	5.96	6.06	5.45	5.54	5.23	5.55	5.95	6.28	5.41	6.63
25	5.80	5.88	6.02	5.88	5.35	5.40	5.38	5.60	5.98	6.04	5.92	6.54
EOM	5.70	5.26	6.06	5.99	5.41	5.43	5.45	5.77	6.06	5.73	6.22	6.56

WTR YR 1985 MEAN 5.80 HIGH 3.96 FEB 12 LOW 6.64 SEP 21

HERTFORD COUNTY

362845077005501. Local number, HC-55.
LOCATION.--Lat 36°28'45", long 77°00'55", Hydrologic Unit 03010203, near Como. Owner: Charles Deloatch.
AQUIFER.--Sands of Lower Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 in, depth 340 ft, cased to 340 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Land-surface datum is 28.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.79 ft above land-surface datum.
PERIOD OF RECORD.--December 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.36 ft below land-surface datum, May 30, 31, 1966; lowest measured, 96.25 ft below land-surface datum, July 10, 1985.

WATER LEVEL, IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 23	96.18	Jan. 17	96.24	Apr. 9	95.97	May 21	96.17	July 10	96.25	Aug. 14	96.00
Dec. 6	96.20	Feb. 26	95.99								

362642077051501. Local number, HC-81.
LOCATION.--Lat 36°26'42", long 77°05'15", Hydrologic Unit 03010204, at Murfreesboro. Owner: Town of Murfreesboro.
AQUIFER.--Lower Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled public-supply (standby) well, diameter 3 in, depth 215 ft, cased to 215 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Land-surface datum is 13.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.09 ft above land-surface datum (since Jan. 1, 1970).
PERIOD OF RECORD.--February 1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.26 ft above land-surface datum, Apr. 8, 1964; lowest measured, 11.87 ft below land-surface datum, Aug. 14, 1985.

WATER LEVEL, IN FEET ABOVE OR BELOW (-) LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 23	-10.11	Jan. 17	-10.50	Apr. 9	-10.14	May 21	-10.75	July 10	-11.09	Aug.14	-11.87
Dec. 7	-10.30	Feb. 26	-10.13								

HERTFORD COUNTY--Continued

362351076555401. Local number, NC-82.
LOCATION.--Lat 36°23'51", long 76°55'54", Hydrologic Unit 03010203, at Winton. Owner: Town of Winton.
AQUIFER.--Sand of Upper Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 283 ft, drilled to 309 ft, cased to 237 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Land-surface datum is 41.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.35 ft above land-surface datum.
PERIOD OF RECORD.--October 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.58 ft below land-surface datum, Sept. 17, 1967; lowest measured, 32.98 ft below land-surface datum, July 10, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 23	31.59	Jan. 17	31.89	Apr. 10	32.07	May 20	32.09	July 10	32.58	Aug. 14	32.27
Dec. 7	31.94	Feb. 25	31.97								

HOKE COUNTY

350340079212501. Local number, NC-35.
LOCATION.--Lat 35°03'40", long 79°21'25", Hydrologic Unit 03040203, at McCain. Owner: North Carolina Tuberculosis Sanitarium.
AQUIFER.--Upper Cape Fear and Black Creek aquifers of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 24 in, depth 76 ft, drilled to 309 ft, cased to 309 ft, gravel walled.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 355 ft. Measuring point: Top of casing, 1.40 ft above land-surface datum.
PERIOD OF RECORD.--April 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.60 ft below land-surface datum, May 7, 1973; lowest, 8.27 ft below land-surface datum, Oct. 14, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 4	7.96	Dec. 5	6.70	Feb. 6	6.40	Apr. 24	7.05	May 22	7.32	Aug. 22	7.15
Oct. 16	6.58	Jan. 9	6.80	Mar. 12	6.45						

JONES COUNTY

350103077150601. Local number, NC-73.
LOCATION.--Lat 35°01'03", long 77°15'06", Hydrologic Unit 03020204, near Pollocksville. Owner: Oak Grove Marine Air Station.
AQUIFER.--Unconfined Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Driven observation well, diameter 8 in, depth 18 ft, cased to 18ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 11.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf 3.28 ft above land-surface datum (since May 7, 1979).
PERIOD OF RECORD.--May 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.66 ft below land-surface datum, Apr. 2-3, 1983; lowest, 10.12 ft below land-surface datum, Jan. 19-20, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.85	7.67	8.41	8.94	9.09	8.35	8.74	9.12	9.40	9.70	8.76	8.96
10	7.01	7.79	8.50	9.00	8.69	8.40	8.85	9.13	9.44	9.81	8.59	9.09
15	7.15	7.94	8.62	9.03	8.40	8.53	8.89	9.19	9.56	9.65	8.63	9.08
20	7.28	8.10	8.72	9.10	8.21	8.60	8.92	9.24	9.66	9.62	8.73	9.12
25	7.46	8.17	8.80	9.19	8.23	8.56	9.03	9.29	9.73	9.65	8.69	9.16
EOM	7.63	8.29	8.91	9.28	8.31	8.65	9.08	9.33	9.74	9.43	8.84	8.25

WTR YR 1985 MEAN 8.74 HIGH 6.72 OCT 1 LOW 9.81 JUL 10 AND OTHERS

LENOIR COUNTY

350306077444201. Local number, NC-51.
LOCATION.--Lat 35°03'06", long 77°44'42", Hydrologic Unit 03020204, Pink Hill School, at Pink Hill. Owner: Lenoir County Board of Education.
AQUIFER.--Peedee aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 151 ft, drilled to 195 ft, cased to 125 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 134 ft. Measuring point: Top of instrument shelf, 1.45 ft above land-surface datum.
PERIOD OF RECORD.--April 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.03 ft below land-surface datum, Apr. 8, 1973; lowest, 61.02 ft below land-surface, July 11, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 22	55.91	Jan. 15	56.63	Apr. 10	56.28	July 11	61.02	Aug. 5	58.34	Sept. 24	58.44
Dec. 3	56.34	Feb. 28	56.07	May 22	56.76						

351600077381001. Local number, NC-128.
LOCATION.--Lat 35°16'00", long 77°38'10", Hydrologic Unit 03020202, at Kinston. Owner: City of Kinston.
AQUIFER.--Sands of Black Creek aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 10 in, depth 300 ft, cased to 160 ft.
INSTRUMENTATION.--Digitial recorder --30-minute punch.
DATUM.--Land-surface datum is 33.5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.10 ft above land-surface datum.
PERIOD OF RECORD.--September 1968 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.83 ft below land-surface datum, Dec. 30, 1968; lowest, 78.36 ft below land-surface datum, Sept. 26, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.31	72.91	73.09	70.06	70.87	70.87	72.32	73.46	76.13	77.03	76.22	77.01
10	71.98	73.85	72.14	70.28	70.18	71.30	72.03	74.24	76.12	77.26	76.65	77.22
15	71.54	73.57	72.48	70.62	69.40	72.00	72.24	74.63	---	76.31	76.87	77.49
20	72.06	73.30	71.60	70.94	69.06	71.73	72.99	74.29	---	77.07	76.40	78.17
25	72.79	72.91	70.61	71.31	69.36	70.86	73.34	75.03	---	77.66	76.67	78.12
EOM	72.78	73.32	70.07	71.43	71.14	72.08	73.80	75.50	---	76.90	77.06	77.26

WTR YR 1985 MEAN 73.52 HIGH 69.06 FEB 20 LOW 78.29 SEP 21

MARTIN COUNTY

355734077180001. Local Number, NC-43.
LOCATION.--Lat 35°57'34', long 77°18'00", Hydrologic Unit 03010107, West Martin School, at Oak City. Owner: Martin County Board of Education.
AQUIFER.--Black Creek aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 87 ft, cased to 88 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 81.75 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.26 ft above land-surface datum (since Sept. 19, 1978).
PERIOD OF RECORD.--February 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.67 ft below land-surface datum, June 8, 1961; lowest, 19.3 ft below land-surface datum, Nov. 8, 9, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.24	15.26	16.13	15.73	13.87	13.13	14.01	15.18	16.38	16.67	14.77	14.27
10	14.37	15.47	16.02	15.22	13.36	13.29	14.24	15.41	16.40	16.86	14.25	14.54
15	14.50	15.66	15.98	14.85	13.00	13.48	14.35	15.59	16.49	16.85	14.15	14.88
20	14.70	15.85	15.90	14.73	12.92	13.65	14.55	15.76	16.40	16.64	14.15	15.21
25	14.93	16.02	15.89	14.65	12.96	13.74	14.72	15.88	16.40	16.53	14.10	15.46
EOM	15.15	16.08	15.98	14.58	13.07	13.88	14.98	16.17	16.57	15.76	14.07	14.95

WTR YR 1985 MEAN 15.03 HIGH 12.92 FEB 20 LOW 16.86 JUL 10

GROUND-WATER LEVELS

MECKLENBURG COUNTY

350126080503903. Local number, U. S. Hwy 521 WB1A

LOCATION.--Lat 35°01'26", long 80°50'39", Hydrologic Unit 03050103, near Pineville. Owner: U. S. Geological Survey.

AQUIFER.--Unconfined saprolite derived from felsic metavolcanic rock.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 26.0 ft, cased 21.0 ft, screened 21.0 to 26.0 ft below land-surface datum. Sand filled from 21.0 ft to 26.0 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 688.6 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.20 ft above land-surface datum.

REMARKS.--Well is part of the Charlotte-Mecklenburg urban hydrology study.

PERIOD OF RECORD.--December 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.92 ft below land-surface datum, Mar. 4, 5, 1985; lowest, 22.37 ft below land-surface datum Aug. 17, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			---	20.90	19.00	16.92	18.14	19.44	20.65	21.64	22.21	18.99
10			---	20.36	18.33	17.01	18.46	19.67	20.81	21.78	22.33	18.91
15			---	20.12	17.65	17.19	18.61	19.88	20.96	21.94	21.75	19.12
20			21.10	20.07	17.34	17.40	18.75	20.05	21.15	22.09	20.71	19.34
25			21.22	20.13	17.10	17.67	18.96	20.20	21.32	22.20	19.54	19.61
EOM			21.31	20.33	17.04	17.87	19.23	20.44	21.49	22.19	19.35	19.91

WTR YR 1985 MEAN 19.82 HIGH 16.92 MAR 4 AND OTHERS LOW 22.38 AUG 13

351023080542703. Local number, YRWB

LOCATION.--Lat 35°10'23", long 80°54'27", Hydrologic Unit 03050103, at York Road landfill, at Charlotte. Owner: U. S. Geological Survey.

AQUIFER.--Unconfined saprolite derived from metamorphosed quartz diorite.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 25.0 ft, cased to 20.0 ft, screened from 20.0 ft to 25.0 ft. Sand filled from 20.0 ft to 25.0 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 612 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.50 ft above land-surface datum.

REMARKS.--Well is part of the Charlotte-Mecklenburg urban hydrology study.

PERIOD OF RECORD.--October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.73 ft below land-surface datum, Feb. 2, 1985; lowest, 16.0 ft below land-surface datum, Sept. 28, 29, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.94	15.47	15.19	14.49	14.14	14.89	15.24	15.40	15.53	15.45	15.75	15.56
10	15.93	15.74	15.35	15.24	14.52	15.09	15.35	15.41	15.43	15.62	15.82	15.67
15	15.95	15.80	15.59	15.43	14.54	15.13	15.23	15.40	15.41	15.70	15.94	15.85
20	15.92	15.90	15.63	15.47	14.79	15.20	15.25	15.09	15.51	15.83	15.50	15.89
25	15.64	15.92	15.77	15.54	14.91	15.14	15.30	15.34	15.61	15.83	15.05	15.94
EOM	15.69	15.71	15.81	15.12	14.54	15.17	15.42	15.44	15.47	15.49	15.39	16.01

WTR YR 1985 MEAN 15.43 HIGH 13.79 FEB 2 AND OTHERS LOW 16.02 SEP 28 AND OTHERS

351331080411603. Local number, HBW 2101A.

LOCATION.--Lat 35°13'31", long 80°41'16", Hydrologic Unit 03050103, at Harrisburg Road landfill, near Mint Hill. Owner: U. S. Geological Survey.

AQUIFER.--Unconfined saprolite derived from metamorphosed quartz diorite.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 32.2 ft, cased 27.2 ft, screened from 27.2 ft to 32.2 ft., sand filled from 27.2 ft to 32.2 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Land-surface datum is 758.25 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.50 ft above land-surface datum.

REMARKS.--Well is part of the Charlotte-Mecklenburg urban hydrology study.

PERIOD OF RECORD.--November 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.15 ft below land-surface datum, Mar. 12, 1985; lowest, 22.02 ft below land-surface datum, Aug. 17, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		20.70	21.29	20.14	18.28	16.18	17.83	19.74	19.00	19.86	21.45	18.84
10		20.88	20.74	19.52	17.69	16.26	18.37	19.95	19.18	20.01	21.67	18.84
15		21.04	20.42	19.07	17.04	16.50	18.51	19.99	18.74	20.39	21.95	19.37
20		21.22	20.18	18.88	16.62	16.79	18.85	19.57	18.49	20.80	21.90	19.50
25		21.24	20.25	18.77	16.46	17.18	19.06	18.98	18.78	21.23	21.05	19.79
EOM		21.31	20.32	18.86	16.46	17.43	19.45	18.80	19.60	21.35	19.85	20.10

WTR YR 1985 MEAN 19.40 HIGH 16.15 MAR 12 LOW 22.02 AUG 17

MECKLENBURG COUNTY--Continued

351730080524203. Local number, MC-146.
LOCATION.--Lat 35°17'30", long 80°52'42", Hydrologic Unit 03050101, in Hornets Nest Park, near Huntersville. Owner: U. S. Geological Survey.
AQUIFER.--Unconfined saprolite derived from metamorphosed quartz diorite.
WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 17.1 ft, cased to 12.1 ft, screened from 12.1 ft to 17.1 ft. Sand filled from 12.1 ft to 17.1 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Elevation of land-surface datum is 730 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.90 ft above land-surface datum.
REMARKS.--Well is part of the State-wide climatic-effects water-level network.
PERIOD OF RECORD.--November 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.31 ft below land-surface datum, Feb. 2, 1985; lowest, 6.67 ft below land-surface datum, Sept. 30, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		6.50	5.54	5.09	3.56	3.74	4.30	4.77	5.02	5.57	5.57	5.38
2		6.50	5.53	5.08	3.31	3.82	4.34	4.70	5.09	5.53	5.63	5.46
3		6.49	5.12	4.52	3.66	3.92	4.34	4.27	5.09	5.57	5.70	5.52
4		6.18	5.13	3.95	3.88	3.94	4.38	4.28	5.14	5.64	5.77	5.59
5		5.98	4.92	4.05	3.76	3.98	4.38	4.35	5.18	5.69	5.84	5.67
6		5.90	4.55	4.21	3.61	4.08	4.38	4.44	5.08	5.73	5.90	5.74
7		5.92	4.69	4.27	3.65	4.12	4.37	4.53	4.25	5.73	5.93	5.81
8		5.90	4.75	4.38	3.78	4.08	4.43	4.61	3.80	5.79	5.95	5.86
9		5.90	4.81	4.47	3.84	4.12	4.43	4.65	4.07	5.84	5.96	5.90
10		5.85	4.84	4.47	3.90	4.16	4.45	4.64	4.28	5.89	6.02	5.96
11		5.79	4.88	4.50	3.89	4.15	4.44	4.60	4.44	5.94	6.10	6.02
12		5.80	4.91	4.56	3.43	4.15	4.45	4.38	4.53	6.00	6.16	6.09
13		5.80	4.95	4.57	3.59	4.21	4.41	4.44	4.66	6.01	6.23	6.15
14		5.80	4.99	4.56	3.70	4.20	4.40	4.55	4.77	6.01	6.29	6.20
15		5.79	5.01	4.62	3.77	4.25	4.43	4.65	4.85	6.04	6.32	6.23
16		5.65	5.01	4.66	3.85	4.26	4.41	3.75	4.82	6.06	6.36	6.26
17		5.66	5.01	4.58	3.91	4.22	4.33	3.55	4.81	6.13	5.82	6.29
18		5.65	5.01	4.56	3.97	4.29	4.36	3.82	4.88	6.19	4.84	6.33
19		5.64	5.02	4.57	3.95	4.33	4.37	4.06	4.97	6.24	4.97	6.37
20		5.60	5.04	4.61	3.97	4.33	4.41	4.21	5.05	6.29	5.12	6.40
21		5.69	5.06	4.65	4.02	4.34	4.46	4.32	5.13	6.33	5.21	6.42
22		5.60	5.04	e4.63	4.24	4.23	4.51	4.42	5.20	6.37	5.28	6.45
23		5.65	5.07	4.63	4.14	4.06	4.55	4.50	5.25	6.37	5.36	6.49
24		5.64	5.05	4.62	4.14	4.07	4.57	4.57	5.30	6.34	5.26	6.50
25		5.65	5.08	4.62	4.16	4.16	4.54	4.62	5.34	6.18	4.87	6.55
26		5.65	5.10	4.69	3.45	4.21	4.59	4.71	5.41	6.10	4.90	6.60
27		5.65	5.09	4.66	3.53	4.19	4.62	4.78	5.48	6.03	4.95	6.62
28		5.59	5.08	4.63	3.60	4.19	4.64	4.86	5.54	5.82	5.02	6.66
29		5.55	5.07	4.66	---	4.22	4.70	4.90	5.57	5.72	5.11	6.66
30		5.53	5.08	4.66	---	4.26	4.75	4.94	5.58	5.59	5.20	6.67
31		---	5.10	4.39	---	4.28	---	4.95	---	5.55	5.28	---
MEAN		5.82	5.02	4.55	3.79	4.15	4.46	4.48	4.95	5.94	5.58	6.16

WTR YR 1985 MEAN 5.00 HIGH 3.31 LOW 6.67

MOORE COUNTY

350636079283601. Local number, MO-122.
LOCATION.--Lat 35°06'36", long 79°28'36", Hydrologic Unit 03040203, at Pinebluff. Owner: H. A. Keith.
AQUIFER.--Unconfined sands of Black Creek aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Dug observation well, diameter 24 in, depth 47 ft, cribbed with brick.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 412 ft. Measuring point: Top of wooden platform, 3.95 ft above land-surface datum (since Nov. 2, 1977).
PERIOD OF RECORD.--April 1944 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.71 ft below land-surface datum, Oct. 8, 1971; lowest measured, dry several times 1951-52, 1977-79, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 16	32.20	Jan. 9	32.73	Mar. 12	33.11	May 22	39.50	Aug. 22	38.20	Sept. 23	39.36
Dec. 5	32.44	Feb. 6	32.93	Apr. 24	35.80	July 10	42.98				

NEW HANOVER COUNTY

341000077524201. Local number, NC-20.
LOCATION.--Lat 34°10'00", long 77°52'42", Hydrologic Unit 03030001, near Wilmington. Owner: Walter J. Hodder.
AQUIFER.--Peedee aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in, depth 169 ft, drilled to 173 ft, cased to 173 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Land-surface datum is 21.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 1.85 ft above land-surface datum (since Mar. 11, 1976).
PERIOD OF RECORD.--November 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.42 ft below land-surface datum, June 10, 1966; lowest, 23.89 ft below land-surface datum, July 10, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 23	15.87	Jan. 24	19.00	Apr. 12	19.81	July 10	23.89	Aug. 21	20.84	Sept. 25	20.34
Dec. 4	17.47	Feb. 27	17.52	May 21	21.27						

NORTHAMPTON COUNTY

361608077162601. Local number, NC-27.
LOCATION.--Lat 36°16'08", long 77°16'26", Hydrologic Unit 03010204, at Rich Square. Owner: Boomer Ice Company.
AQUIFER.--Sand of Upper Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 57 ft, drilled to 88 ft, cased to 78 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 74.44 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 1.70 ft above land-surface datum.
PERIOD OF RECORD.--January 1958 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.86 ft below land-surface datum, Feb. 25, 1960; lowest, 14.99 ft below land-surface datum, September 29, 30, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.64	12.34	12.83	12.99	12.25	10.99	11.38	12.06	12.71	12.95	12.95	13.34
10	11.80	12.45	12.85	12.98	12.10	11.12	11.61	12.18	12.74	13.00	12.97	13.42
15	11.90	12.56	12.93	12.97	11.60	11.24	11.58	12.29	12.80	13.01	13.04	13.52
20	12.02	12.67	12.97	12.93	11.58	11.36	11.72	12.39	12.69	13.11	13.12	13.60
25	12.17	12.73	13.04	12.91	11.52	11.34	11.81	12.45	12.78	13.18	13.20	13.68
EOM	12.30	12.79	13.10	12.94	11.30	11.25	11.98	12.58	12.88	13.07	13.27	13.44

WTR YR 1985 MEAN 12.48 HIGH 10.99 MAR 5 LOW 13.68 SEP 25

ONSLOW COUNTY

344425077272501. Local number, NC-52.
LOCATION.--Lat 34°44'25", long 77°27'25", Hydrologic Unit 03030001, at Camp Geiger, near Jacksonville. Owner: U.S. Marine Corps.
AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 18 in, depth 68 ft, drilled to 70 ft, cased to 23 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 24.45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 1.90 ft above land-surface datum.
PERIOD OF RECORD.--January 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.67 ft below land-surface datum, Sept. 14, 1984; lowest, 10.44 ft below land-surface datum, Jan. 3, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.75		5.48	5.81	4.20	4.26	4.99	6.16	7.20	8.06	7.15	6.39
10	4.30		5.17	5.81	3.88	4.65	5.39	6.33	7.35	8.14	6.80	6.67
15	4.72		5.47	5.41	3.59	5.02	5.42	6.49	7.51	8.10	6.79	7.00
20	4.94		5.62	5.36	3.99	5.11	5.61	6.67	7.67	8.23	6.00	7.26
25	---		5.85	5.51	3.91	4.13	5.77	6.80	7.78	8.17	5.88	7.41
EOM	---		5.93	5.53	3.92	4.53	6.05	6.98	7.94	7.37	6.15	5.48

WTR YR 1985 MEAN 5.94 HIGH 2.73 OCT 1 LOW 8.40 JUL 24

ONSLOW COUNTY--Continued

344525077254501. Local number, NC-85

LOCATION.--Lat 34°45'25", long 77°25'45", Hydrologic Unit 03030001, at Jacksonville. Owner: Carolina Power and Light Company.

AQUIFER.--Castle Hayne aquifer of Oligocene and Eocene age.

INSTRUMENTATION.--Digital recorder --60-minute punch.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 103 ft, cased to 106 ft.

DATUM.--Elevation of land-surface datum is 20 ft. Measuring point: Top of instrument shelf, 3.20 ft above land-surface datum.

PERIOD OF RECORD.--January 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.86 ft below land-surface datum, June 10, 1964; lowest, 24.19 ft below land-surface datum, July 3, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.65	18.28	19.96	18.16	22.84	19.64	18.02	---	22.13	23.82	21.91	23.17
10	19.07	18.97	20.17	19.81	23.71	19.32	---	---	22.51	23.77	22.05	23.73
15	18.41	19.88	19.70	21.11	23.43	18.80	---	---	22.90	23.73	22.75	22.68
20	18.81	19.70	18.85	21.28	22.51	19.71	---	---	22.71	23.19	22.33	22.20
25	19.01	20.19	18.14	23.23	21.04	19.16	---	19.65	23.50	22.75	22.16	21.46
EOM	19.01	20.12	17.54	23.49	20.45	18.64	---	20.21	23.52	22.61	22.54	20.75

WTR YR 1985 MEAN 21.00 HIGH 17.27 JAN 3 LOW 23.88 JAN 30

ORANGE COUNTY

355522079043001. Local number, NC-126.

LOCATION.--Lat 35°55'22", long 79°04'30", Hydrologic Unit 03030002, at Chapel Hill. Owner: Chi Psi Fraternity.

AQUIFER.--Unconfined weathered granite of Paleozoic age.

WELL CHARACTERISTICS.--Dug observation well, diameter 36 in, depth 48 ft, lined with rock.

INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.

DATUM.--Land-surface datum is 511.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelf, 3.27 ft above land-surface datum (since July 21, 1981).

PERIOD OF RECORD.--August 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.22 ft below land-surface datum, May 14, 1984; lowest measured, dry, Oct. 11 to Dec. 31, 1940.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 10	38.50	Nov. 20	39.85	Feb. 13	40.23	May 6	40.19	June 26	41.03	Aug. 28	42.15
Oct. 29	39.15	Jan. 2	40.77	Mar. 25	39.94	May 28	40.45	July 24	41.70	Sept.11	42.32
Oct. 30	39.24	Jan. 15	40.76	Apr. 17	40.00	June 17	40.86	July 29	41.75	Sept.29	42.63

PAMLICO COUNTY

351424076332601. Local number, PA-1.

LOCATION.--Lat 35°14'24", long 76°33'26", Hydrologic Unit 03020105, near Hobucken. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined marine sands and clays of the surficial aquifer of post-Miocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 6.06 ft, cased to 2.00 ft, screened from 2.00 ft to 6.06 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch.

DATUM.--Measuring point: Top of casing, 6.24 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water level affected by tidal fluctuations.

PERIOD OF RECORD.--March 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.34 ft above NGVD, Sept. 26, 1985; lowest 1.64 ft below NGVD, June 29, 1985.

WATER LEVEL, IN FEET ABOVE OR BELOW(-) NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.54	1.64	1.69	1.55	1.57	1.49	.53	.72	-0.89	1.41	1.66	1.44
10	1.63	1.58	1.52	1.57	1.48	1.38	.13	.25	-0.90	1.07	1.55	.64
15	2.22	1.51	1.48	1.45	1.48	.82	1.52	1.40	-1.22	1.40	1.46	1.65
20	1.65	1.54	1.42	1.51	1.55	1.41	1.46	.47	-0.84	1.49	1.50	1.47
25	1.69	1.55	1.48	1.42	1.51	1.49	.66	.19	-1.41	1.53	1.52	1.62
EOM	1.67	1.53	1.47	1.57	1.50	.96	.08	-0.53	-0.21	1.52	1.52	1.77

WTR YR 1985 MEAN 1.15 HIGH 2.22 OCT 15 LOW -1.59 JUN 29

PAMLICO COUNTY--Continued

351425076332201. Local number, PA-3.
LOCATION.--Lat 35°14'25", long 76°33'24", Hydrologic Unit 03020105, near Hobucken. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined marine sands and clays of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 6.31 ft, cased to 2.00 ft, screened from 2.00 ft to 6.31 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 5.99 ft above National Geodetic Vertical Datum of 1929.
REMARKS.--Water level affected by tidal fluctuations.
PERIOD OF RECORD.--March 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.18 ft above NGVD, Sept. 27, 1985; lowest, 0.50 ft below NGVD, June 29, 1985.

WATER LEVEL, IN FEET ABOVE OR BELOW(-) NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.58	1.70	1.67	1.53	1.56	1.50	1.11	1.42	.87	1.42	1.64	1.42
10	1.65	1.62	1.49	1.56	1.47	1.45	.64	1.38	1.32	1.37	1.53	1.28
15	2.20	1.52	1.45	1.43	1.48	1.37	1.49	1.44	.61	1.41	1.44	1.63
20	1.69	1.53	1.42	1.50	1.51	1.42	1.43	1.32	.78	1.45	1.48	1.44
25	1.70	1.54	1.47	1.39	1.49	1.51	1.33	1.02	-0.08	1.49	1.50	1.57
EOM	1.68	1.52	1.44	1.53	1.50	1.42	.81	1.34	.53	1.49	1.48	1.77

WTR YR 1985 MEAN 1.40 HIGH 2.20 OCT 15 LOW -0.45 JUN 29

PAMLICO COUNTY

351422076333101. Local number, PA-10.
LOCATION.--Lat 35°14'22", long 76°33'31", Hydrologic Unit 03020105, near Hobucken. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined marine sands and clays of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 5.71 ft, cased to 2.00 ft, screened from 2.00 ft to 5.71 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 6.69 ft above National Geodetic Vertical Datum of 1929.
REMARKS.--Water level affected by tidal fluctuations.
PERIOD OF RECORD.--March 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.63 ft above NGVD, Sept. 27, 1985; lowest, 0.89 ft below NGVD, June 26, 1985.

WATER LEVEL, IN FEET ABOVE OR BELOW(-) NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	e1.50	e1.70	1.58	1.59	1.70	1.51	.68	.88	-0.19	1.24	1.81	1.28
10	e1.60	e1.60	1.44	1.53	1.48	1.28	.37	.51	-0.13	1.08	1.64	.82
15	e2.15	1.47	1.37	1.36	1.51	1.01	1.33	.99	-0.51	1.33	1.36	1.60
20	e1.65	1.46	1.24	1.52	1.55	1.27	1.25	.53	-0.33	1.33	1.54	1.34
25	e1.70	1.51	1.22	1.27	1.48	1.54	.73	.33	-0.76	1.35	1.61	1.51
EOM	e1.65	1.51	1.33	1.63	1.51	1.08	.43	.06	-0.11	1.62	1.53	1.84

WTR YR 1985 MEAN 1.20 HIGH 2.17 SEP 27 LOW -0.81 JUN 26
e Estimated

PAMLICO COUNTY

351424076332701. Local number, PA-12.
LOCATION.--Lat 35°14'24", long 76°33'27", Hydrologic Unit 03020105, near Hobucken. Owner: U.S. Geological Survey
AQUIFER.--Unconfined marine sands and clays of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in., depth 7.50 ft, cased to 2.50 ft, screened from 2.50 ft to 7.50 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Measuring point: Top of casing, 4.97 ft above National Geodetic Vertical Datum of 1929.
REMARKS.--Water level affected by tidal fluctuations.
PERIOD OF RECORD.--March 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.95 ft above NGVD, Sept. 27, 1985; lowest, 0.76 ft below NGVD, June 26, 1985.

WATER LEVEL, IN FEET ABOVE OR BELOW(-) NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.67	1.97	e1.70	e1.60	1.63	1.54	.96	1.01	-0.08	1.31	1.85	1.37
10	1.66	1.73	e1.50	e1.55	1.54	1.41	.64	.72	-0.06	1.09	1.56	.94
15	2.13	1.49	e1.48	1.46	1.54	1.16	1.25	1.12	-0.41	1.38	1.40	1.60
20	1.84	e1.55	e1.32	1.53	1.50	1.39	1.37	.73	-0.22	1.46	1.42	1.38
25	1.66	e1.54	e1.40	1.31	1.50	1.58	.92	.52	-0.65	1.38	1.62	1.45
EOM	1.66	e1.54	1.42	1.48	1.50	1.26	.60	.16	-0.26	1.55	1.40	1.91

WTR YR 1985 MEAN 1.26 HIGH 2.32 SEP 27 LOW -0.71 JUN 27
e Estimated

PASQUOTANK COUNTY

361556076102402. Local number, NC-141.
LOCATION.--Lat 36°15'56", long 76°10'24", Hydrologic Unit 03010205, U.S. Coast Guard Air Base, near Elizabeth City. Owner: U.S. Coast Guard.
AQUIFER.--Surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in, depth 63 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 8.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf, 0.93 ft above land-surface datum (since Mar. 13, 1979).
PERIOD OF RECORD.--June 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 4.89 ft below land-surface datum, Aug. 25, 1984; lowest recorded, 9.39 ft below land-surface datum, Sept. 27, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.95	8.38	8.63	8.14	7.50	7.24	7.20	8.06	8.10	8.39	8.08	8.72
10	8.04	8.36	8.58	8.06	7.45	7.49	7.75	8.07	8.39	8.56	8.23	8.81
15	8.05	8.76	8.61	8.03	6.94	7.65	7.76	8.17	8.50	8.46	8.50	9.27
20	7.49	8.89	8.47	7.75	7.25	7.77	7.82	8.13	8.31	8.74	8.29	9.13
25	8.31	8.86	8.54	8.16	7.25	7.41	7.85	8.14	8.51	8.77	8.31	9.02
EOM	8.50	8.60	8.62	8.10	7.52	7.28	8.17	8.11	8.47	8.15	8.55	8.45

WTR YR 1985 MEAN 8.18 HIGH 6.75 FEB 13 LOW 9.37 SEP 14

361828076163401. Local number, NC-143.
LOCATION.--Lat 36°18'28", long 76°16'34", Hydrologic Unit 03010205, near Elizabeth City. Owner: U. S. Geological Survey.
AQUIFER.--Unconfined sands of the surficial aquifer of post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in, depth 10.2 ft, cased to 10.2 ft, screen from 5.0 ft to 10.2 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.35 ft above land-surface datum.
REMARKS.--Well replaces nearby NC-86.
PERIOD OF RECORD.--November 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.13 ft below land-surface datum, March 27, 1983; lowest, 6.00 ft below land-surface datum, Oct. 10, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.90	4.47	4.44	4.25	.66	1.79	1.90	3.27	4.24	3.92	4.34	5.17
2	3.12	4.34	4.60	4.23	.50	1.33	2.05	3.27	4.43	3.92	4.16	5.18
3	3.18	4.48	4.13	3.85	.73	1.61	2.07	3.25	4.50	3.93	4.30	5.15
4	3.30	4.33	4.18	1.81	.91	1.62	2.22	3.49	4.57	4.03	4.40	5.17
5	3.47	4.20	4.08	1.63	.69	1.60	2.22	3.49	4.26	4.15	4.49	5.19
6	3.65	4.42	3.70	1.85	.51	1.96	2.24	3.42	3.40	4.24	4.56	5.21
7	3.74	4.69	4.07	1.77	.73	1.99	2.43	3.45	3.26	4.12	4.61	5.24
8	3.69	4.71	3.94	1.98	1.05	1.83	2.46	3.71	3.16	4.16	4.53	5.25
9	3.71	4.63	4.00	2.27	1.29	1.92	2.51	3.81	3.31	4.17	4.38	5.23
10	3.81	4.51	3.92	2.21	1.41	2.01	2.66	3.74	3.47	4.25	4.44	5.23
11	3.87	4.36	3.94	1.91	1.35	2.01	2.60	3.72	3.51	4.29	4.54	5.28
12	3.83	4.55	4.02	2.02	.67	1.88	2.70	3.68	3.40	4.17	4.68	5.35
13	3.74	4.68	4.10	2.06	.72	2.12	2.68	3.62	3.42	3.61	4.79	5.41
14	3.80	4.80	4.30	1.99	.96	2.11	2.55	3.66	3.65	3.70	4.85	5.44
15	3.98	4.76	4.31	2.27	1.06	2.24	2.38	3.80	3.70	3.78	4.87	5.40
16	4.14	4.58	4.30	2.52	1.27	2.29	2.48	3.61	3.56	3.91	4.86	5.37
17	4.22	4.76	4.16	2.01	1.42	2.05	2.76	3.33	3.59	4.06	4.84	5.39
18	4.19	4.68	4.13	1.73	1.60	2.28	2.81	3.56	3.46	4.22	4.56	5.43
19	4.16	4.49	4.10	1.82	1.55	2.46	2.72	3.94	2.99	4.36	4.46	5.44
20	4.19	4.80	4.15	1.99	1.62	2.37	2.77	4.05	3.13	4.40	4.55	5.45
21	4.28	4.88	4.20	2.16	1.76	2.47	2.82	3.99	3.35	4.47	4.58	5.46
22	4.29	4.81	4.12	2.17	1.75	2.11	2.84	4.02	3.48	4.56	4.64	5.44
23	4.28	4.66	4.38	2.17	1.76	1.26	2.88	3.95	3.54	4.64	4.75	5.42
24	4.33	4.61	4.25	2.18	1.72	1.30	2.89	3.86	3.58	4.76	4.79	5.45
25	4.40	4.66	4.35	2.17	1.84	1.37	2.89	3.93	3.66	4.77	4.79	5.50
26	4.32	4.74	4.58	2.52	1.78	1.62	3.05	4.05	3.48	4.73	4.90	5.40
27	4.32	4.75	4.38	2.53	1.76	1.61	3.07	4.14	3.52	4.72	4.97	2.90
28	4.31	4.48	4.27	2.43	1.96	1.66	3.07	4.15	3.64	4.74	5.00	2.23
29	4.30	4.28	4.20	2.61	---	1.76	3.27	4.26	3.75	4.37	5.02	2.62
30	4.40	4.35	4.27	2.69	---	1.87	3.31	4.36	3.85	4.32	5.00	2.87
31	4.50	---	4.33	1.88	---	1.89	---	4.26	---	4.35	5.05	---
MEAN	3.95	4.58	4.19	2.31	1.25	1.88	2.64	3.77	3.63	4.25	4.67	4.98

WTR YR 1985 MEAN 3.52 HIGH .50 LOW 5.50

PENDER COUNTY

342500077553001. Local number, NC-26.
LOCATION.--Lat 34°25'00", long 77°55'30", Hydrologic Unit 03030007, near Rocky Point. Owner: Arvida Farms.
AQUIFER.--Peedee aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in, depth 139 ft, cased to 141 ft.
INSTRUMENTATION.--Digital recorder--60-minute punch.
DATUM.--Elevation of land-surface datum is 20 ft. Measuring point: Top of casing, 1.00 ft above land-surface datum.
PERIOD OF RECORD.--December 1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.97 ft below land-surface datum, May 14, 15, 1966, Jan. 16, 1975; lowest, 6.25 ft below land-surface datum, May 5, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.61	2.45	2.44	2.36	1.95	1.80	2.12	2.42		---	1.99	1.64
10	1.75	2.54	2.18	2.37	1.53	1.95	2.26	2.35		3.70	1.89	1.83
15	1.96	2.61	2.18	2.37	1.41	2.08	2.34	2.35		3.83	1.91	2.10
20	2.13	2.64	2.23	2.27	1.56	2.14	2.35	2.41		3.94	1.91	2.32
25	2.27	2.65	2.29	2.26	1.62	1.99	2.39	2.51		4.02	1.66	2.47
EOM	2.39	2.61	2.35	2.30	1.69	2.02	2.44	---		2.77	1.69	2.22

WTR YR 1985 MEAN 2.26 HIGH 1.41 FEB 14 AND OTHERS LOW 4.03 JUL 24

PITT COUNTY

353352077150101. Local number, PI-527.
LOCATION.--Lat 35°33'52", long 77°15'01", Hydrologic Unit 03020103, at Galloway Crossroads. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 6 in, depth 14.6 ft, cased to 9.6 ft, screened from 9.6 ft to 14.6 ft.
INSTRUMENTATION.--Digital Recorder --60-minute punch.
DATUM.--Measuring point: Top of casing, 28.43 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).
REMARKS.--During most summers, water levels affected for short periods by nearby irrigation of row crops.
PERIOD OF RECORD.--December 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.54 ft above NGVD, May 5, 1978; lowest, 18.73 ft above NGVD, July 22, 1980.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.11	22.91	22.95	23.46	23.53	23.15	22.91	22.53	21.88	21.98	22.92	22.47
10	23.01	22.91	22.98	23.19	23.53	23.09	22.84	22.41	21.94	22.02	23.09	22.31
15	22.94	22.86	22.98	23.18	23.53	23.03	22.86	22.39	21.74	22.37	22.71	22.18
20	22.94	22.88	22.99	23.16	23.32	22.99	22.79	22.20	22.00	22.16	23.22	22.12
25	22.90	22.88	22.94	23.09	23.25	23.04	22.66	22.29	21.66	22.23	22.90	22.28
EOM	22.91	22.93	22.92	23.20	23.20	22.97	22.55	22.05	21.60	22.53	22.69	22.90

WTR YR 1985 MEAN 22.75 HIGH 23.98 FEB 6 LOW 21.54 JUN 29

353350077150101. Local number, PI-528.
LOCATION.--Lat 35°33'50", long 77°15'01", Hydrologic Unit 03020103, at Galloway Crossroads. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 6 in, depth 14.2 ft, cased to 9.2 ft, screened from 9.2 ft to 14.2 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Measuring point: Top of casing, 35.96 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).
REMARKS.--During most summers, water levels affected for short periods by nearby irrigation of row crops.
PERIOD OF RECORD.--December 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 31.82 ft above NGVD, Nov 6-7, 1977; lowest, 25.91 ft above NGVD, Aug. 15-17, 1977.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.24	28.15	28.32	29.37	29.13	28.21	27.85	27.37	26.60	26.31	27.76	27.48
10	28.15	28.05	28.46	28.38	29.04	28.06	27.75	27.27	26.57	26.59	27.93	27.33
15	28.07	28.00	28.40	28.24	29.04	27.94	27.73	27.10	26.50	27.12	27.64	27.16
20	28.11	28.00	28.37	28.18	28.54	27.92	27.64	26.97	26.50	27.07	28.21	27.02
25	28.18	28.06	28.18	28.02	28.42	27.97	27.56	26.84	26.45	26.97	27.87	26.98
EOM	28.34	28.17	28.19	28.39	28.30	27.95	27.45	26.69	26.34	---	27.66	27.62

WTR YR 1985 MEAN 27.77 HIGH 29.91 FEB 6 LOW 26.31 JUL 5

353304077151401. Local number, PI-529.
LOCATION.--Lat 35°33'04", long 77°15'14", Hydrologic Unit 03020103, at Galloway Crossroads. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 6 in, depth 14.4 ft, cased to 9.4 ft, screened from 9.4 ft to 14.4 ft.
INSTRUMENTATION. --Digital recorder --60-minute punch.
DATUM.--Measuring point: Top of casing, 49.93 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).
PERIOD OF RECORD.--December 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.68 ft above NGVD, Feb. 14, 1983; lowest, 41.34 ft above NGVD, Nov. 6-7, 1978.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.00	45.03	44.21	45.37	46.67	45.84	45.08	44.00	42.81	42.35	44.89	44.82
10	45.64	44.55	44.39	45.56	46.49	45.62	44.81	43.81	42.74	42.95	45.71	44.49
15	45.35	44.14	44.30	45.65	46.57	45.40	44.83	43.82	42.56	43.33	45.08	43.99
20	45.12	44.06	44.33	45.68	46.26	45.26	44.68	43.36	42.59	43.07	45.95	43.77
25	44.90	44.01	44.20	45.47	46.08	45.60	44.45	43.26	42.34	43.11	45.66	43.63
EOM	44.80	44.11	44.11	45.67	45.89	45.34	44.16	43.01	42.31	43.34	45.22	45.58

WTR YR 1985 MEAN 44.58 HIGH 47.17 FEB 6 LOW 42.21 JUN 29

353255077150601. Local number, PI-530.
Location.--Lat 35°32'55", long 77°15'06", Hydrologic Unit 03020103, at Galloway Crossroads. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2 in, depth 21.1 ft, cased to 16.1 ft, screened from 16.1 ft to 21.1 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Measuring point: Top of casing, 51.92 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service). Top of casing raised from 51.12 ft above NGVD, July 11, 1979.
PERIOD OF RECORD.--December 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.20 ft above NGVD, Aug. 1, 1984; lowest measured, 43.00 ft above NGVD, Nov. 15, 1978.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 4	49.74	Nov. 15	48.70	Dec. 19	48.15	Feb. 7	49.67	Mar. 26	49.08	June 19	48.86

353232077154301. Local number, PI-531.
LOCATION.--Lat 35°32'32", long 77°15'43", Hydrologic Unit 03020103, at Galloway Crossroads. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2 in, depth 20.4 ft, cased to 15.4 ft, screened from 15.4 ft to 20.4 ft.
INSTRUMENTATION.--Measured every six weeks with chalked tape by USGS personnel.
DATUM.--Measuring point: Top of casing, 57.69 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).
PERIOD OF RECORD.--December 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.01 ft above NGVD, Mar. 2, 1983; lowest measured, 48.96 ft above NGVD, Nov. 15, 1978.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 4	55.36	Nov. 15	54.21	Dec. 19	53.89	Feb. 7	55.04	Mar. 26	55.32	June 19	54.84

PITT COUNTY--Continued

353219077153801. Local number, PI-532.
LOCATION.--Lat 35°32'19", long 77°15'38", Hydrologic Unit 03020103, at Galloway Crossroads. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 6 in, depth 10.9 ft, cased to 5.9 ft, screened from 5.9 ft to 10.9 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Measuring point: Top of casing, 57.31 ft above National Geodetic Vertical Datum of 1929, (levels by Soil Conservation Service).
PERIOD OF RECORD.--December 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.22 ft above NGVD, Sept. 14, 1984; lowest, 47.43 ft above NGVD, Nov. 6-8, 1978.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.60	51.30	50.94	51.11	53.76	53.11	51.98	50.64	49.09	49.56	52.46	51.94
2	53.46	51.26	50.89	51.08	54.11	53.14	51.88	50.60	49.00	49.62	52.64	51.83
3	53.33	51.16	51.16	51.41	53.99	53.03	51.83	50.62	48.94	49.37	52.46	51.73
4	53.18	51.35	51.12	53.02	53.79	53.01	51.75	50.54	48.90	49.18	52.28	51.61
5	53.05	51.77	51.28	53.56	53.98	52.96	51.70	50.46	48.88	49.09	52.13	51.50
6	52.95	51.64	51.71	53.40	54.45	52.81	51.65	50.41	49.32	50.05	51.97	51.39
7	52.86	51.50	51.65	53.33	54.08	52.78	51.56	50.33	49.22	50.65	52.03	51.27
8	52.77	51.44	51.65	53.20	53.93	52.77	51.50	50.24	49.11	50.40	52.92	51.16
9	52.67	51.41	51.61	53.08	53.77	52.68	51.44	50.21	48.95	50.19	52.93	51.07
10	52.57	51.38	51.61	53.15	53.68	52.60	51.38	50.18	48.83	50.01	52.77	50.99
11	52.48	51.37	51.59	53.63	53.66	52.54	51.36	50.13	48.78	51.17	52.58	50.89
12	52.40	51.24	51.58	53.46	54.19	52.49	51.30	50.08	48.75	51.33	52.39	50.76
13	52.33	51.18	51.55	53.33	54.02	52.37	51.28	50.03	48.72	51.11	52.19	50.60
14	52.24	51.10	51.49	53.25	53.84	52.32	51.33	49.95	48.63	50.91	52.03	50.49
15	52.12	51.08	51.49	53.10	53.73	52.22	51.34	49.90	48.59	50.76	51.90	50.41
16	52.04	51.08	51.49	53.00	53.60	52.19	51.33	49.88	48.67	50.61	51.81	50.33
17	51.98	50.98	51.51	53.13	53.51	52.23	51.56	49.87	48.60	50.47	51.80	50.21
18	51.95	51.01	51.49	53.34	53.43	52.09	51.41	49.78	48.55	50.30	52.52	50.11
19	51.90	51.02	51.45	53.24	53.41	52.01	51.33	49.66	48.56	50.13	53.36	50.03
20	51.83	50.93	51.41	53.11	53.55	51.97	51.23	49.59	48.65	50.01	53.15	49.95
21	51.75	50.90	51.41	52.98	53.60	51.91	51.15	49.59	48.52	49.87	53.10	49.86
22	51.69	50.89	51.39	52.91	53.50	52.28	51.08	49.66	48.47	49.78	53.25	49.89
23	51.63	50.89	51.32	52.84	53.43	52.62	51.02	49.58	48.43	49.63	53.02	50.01
24	51.57	50.86	51.32	52.78	53.37	52.56	50.98	49.55	48.39	50.22	52.84	49.83
25	51.53	50.80	51.25	52.73	53.30	52.45	50.96	49.51	48.35	50.99	52.80	49.73
26	51.51	50.77	51.18	52.61	53.27	52.36	50.86	49.37	48.33	50.73	52.69	49.69
27	51.46	50.76	51.22	52.58	53.21	52.32	50.83	49.29	48.27	50.53	52.58	52.66
28	51.41	50.88	51.21	52.57	53.10	52.25	50.80	49.24	48.24	50.48	52.47	53.14
29	51.40	51.15	51.19	52.55	---	52.17	50.72	49.21	48.22	50.35	52.35	52.89
30	51.39	51.04	51.14	52.56	---	52.08	50.66	49.17	48.52	50.24	52.26	52.72
31	51.33	---	51.11	53.21	---	52.06	---	49.14	---	50.16	52.11	---
MEAN	52.21	51.14	51.37	52.88	53.69	52.46	51.31	49.88	48.68	50.25	52.51	50.96

WTR YR 1985 MEAN 51.44 HIGH 54.45 LOW 48.22

PITT COUNTY--Continued

353208077153801. Local number, PI-533.

LOCATION.--Lat 35°32'08", long 77°15'38", Hydrologic Unit 03020103, at Galloway Crossroads. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 6 in, depth 9.3 ft, cased to 4.3 ft, screened from 4.3 ft to 9.3 ft.

INSTRUMENTATION.--Digital recorder --60-minute punch.

DATUM.--Measuring point: Top of casing, 53.61 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service).

PERIOD OF RECORD.--December 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.03 ft above NGVD, Feb. 25, 1979; lowest, 45.93 ft above NGVD, Nov. 6, 1978.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.14	47.82	47.70	50.12	50.38	48.73	47.95	47.38	46.83	46.88	48.59	48.15
10	48.71	47.64	47.89	49.30	50.02	48.49	47.78	47.27	46.85	47.29	49.20	47.82
15	48.34	47.53	47.80	49.12	50.02	48.28	47.75	47.19	46.69	47.49	48.26	47.51
20	48.05	47.46	47.78	48.90	49.41	48.10	47.78	47.08	46.84	47.12	49.76	47.27
25	47.85	47.41	47.70	48.55	49.16	48.27	47.64	47.01	46.55	47.75	49.10	47.13
EOM	47.70	47.59	47.63	49.18	48.95	48.08	47.49	46.90	46.88	47.29	48.58	49.25

WTR YR 1985 MEAN 48.07 HIGH 51.29 FEB 6 LOW 46.48 JUN 29

353043077150001. Local number, PI-534.

LOCATION.--Lat 35°30'43", long 77°15'00", Hydrologic Unit 03020103, at Blackjack. Owner: U. S. Geological Survey.

AQUIFER.--Unconfined sand and clay of the surficial aquifer of Post-Miocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 6 in, depth 9.6 ft, cased to 4.6 ft, screened from 4.6 ft to 9.6 ft.

INSTRUMENTATION.--Digital recorder --60-minute punch.

DATUM.--Measuring point: Top of casing, 35.84 ft above National Geodetic Vertical Datum of 1929 (levels by Soil Conservation Service). Top of casing raised from 34.01 ft above NGVD, Mar. 19, 1979.

PERIOD OF RECORD.--January 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 34.02 ft above NGVD, June 11, 1979; lowest recorded, 26.96 ft above NGVD, June 29, 1985.

WATER LEVEL, IN FEET ABOVE NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.64	29.40	30.19	32.21	32.26	---	30.06	28.94	27.65	27.35	29.81	29.90
10	30.15	29.39	30.62	31.67	---	---	29.75	28.75	27.53	27.48	30.34	29.46
15	29.80	29.35	30.35	31.55	---	---	29.69	28.57	27.30	28.17	29.56	29.11
20	29.66	29.24	30.20	31.85	---	---	29.98	28.35	27.27	28.07	31.75	28.87
25	29.41	29.20	30.08	31.44	---	---	29.45	28.19	27.11	27.94	31.51	28.80
EOM	29.38	29.60	29.99	32.25	---	30.51	29.13	27.91	27.02	28.36	30.55	30.74

WTR YR 1985 MEAN 29.58 HIGH 32.46 FEB 6 LOW 26.98 JUN 29

SAMPSON COUNTY

350030078194001. Local number, NC-24.

LOCATION.--Lat 35°00'30", long 78°19'40", Hydrologic Unit 03030006, at Clinton. Owner: City of Clinton.

AQUIFER.--Upper Cape Fear aquifer of late Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 314 ft, multi-screened, top of screens 257 and 307 ft. Originally drilled to 385 ft.

INSTRUMENTATION.--Digital recorder --60-minute punch.

DATUM.--Land-surface datum is 157.5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land-surface datum.

PERIOD OF RECORD.--May 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.83 ft below land-surface datum, Oct. 13, 1964; lowest, 31.55 ft below land-surface datum, Oct. 20, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.04	29.76	29.46	28.91	27.11	27.45	27.87	28.79	29.44	29.94	29.00	29.31
10	29.09	29.68	29.44	28.95	26.74	27.49	27.85	28.81	29.28	30.31	29.35	29.40
15	28.85	29.48	29.68	28.83	26.46	27.65	28.87	29.20	29.48	30.18	29.27	29.55
20	29.33	29.55	29.50	28.17	26.98	27.66	28.87	29.00	29.49	30.35	29.18	29.75
25	29.67	29.63	29.19	27.76	26.98	27.45	28.94	29.17	29.68	29.74	29.09	29.76
EOM	29.69	29.58	29.00	27.42	27.53	27.63	28.80	29.46	29.91	28.99	29.24	29.67

WTR YR 1985 MEAN 28.92 HIGH 26.46 FEB 14 AND OTHERS LOW 30.38 JUL 21

TRANSYLVANIA COUNTY

351808082374302. Local number, NC-144.
LOCATION.--Lat 35°18'08", long 82°37'43", Hydrologic Unit 06010105, at Blantyre. Owner: U. S. Geological Survey.
AQUIFER.--Unconfined granite of Paleozoic age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, depth 58 ft, cased to 58 ft, gravel filled from 5.0 ft to 58 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 2,147.11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.30 ft above land-surface datum.
REMARKS.--Well replaces nearby NC-127.
PERIOD OF RECORD.--October 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.46 ft below land-surface datum, May 29, 1984; lowest, 37.95 ft below land-surface datum, Dec. 23-24, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.21	30.15	31.44	31.91	31.78	30.43	29.77	30.09	30.67	32.10	32.58	32.47
2	28.33	30.15	31.46	31.94	31.66	30.40	29.80	30.06	30.73	32.11	32.63	32.43
3	28.36	30.21	31.46	31.92	31.71	30.39	29.79	30.08	30.75	32.13	32.66	32.37
4	28.43	30.21	31.55	31.81	31.70	30.30	29.83	30.15	30.79	32.16	32.64	32.33
5	28.52	30.26	31.49	31.93	31.56	30.26	29.79	30.14	30.83	32.17	32.63	32.29
6	28.61	30.41	31.44	31.95	31.53	30.31	29.85	30.13	30.91	32.22	32.60	32.27
7	28.66	30.51	31.61	31.86	31.65	30.26	29.90	30.13	30.94	32.26	32.59	32.25
8	28.67	30.53	31.58	31.93	31.67	30.13	29.90	30.19	30.96	32.26	32.59	32.20
9	28.73	30.53	31.60	31.99	31.63	30.12	29.92	30.22	31.03	32.26	32.62	32.15
10	28.81	30.51	31.58	31.94	31.57	30.09	29.97	30.22	31.08	32.27	32.62	32.13
11	28.87	30.55	31.63	31.91	31.39	29.99	29.96	30.19	31.11	32.32	32.64	32.12
12	28.92	30.70	31.63	31.97	31.17	29.95	30.00	30.21	31.12	32.34	32.65	32.12
13	28.93	30.77	31.71	31.91	31.31	29.98	29.97	30.23	31.26	32.37	32.67	32.16
14	28.99	30.80	31.77	31.83	31.29	29.92	29.92	30.26	31.33	32.36	32.67	32.17
15	29.08	30.80	31.76	31.94	31.23	29.94	29.87	30.26	31.36	32.36	32.67	32.11
16	29.21	30.82	31.74	31.95	31.22	29.89	29.89	30.22	31.38	32.38	32.68	32.06
17	29.29	30.90	31.74	31.78	31.22	29.80	30.01	30.18	31.47	32.41	32.55	32.07
18	29.32	30.87	31.75	31.79	31.19	29.90	30.05	30.31	31.49	32.44	32.51	32.09
19	29.36	30.89	31.74	31.84	31.05	29.89	30.05	30.40	31.57	32.45	32.55	32.06
20	29.44	31.10	31.76	31.87	31.00	29.83	30.05	30.41	31.68	32.44	32.55	32.04
21	29.51	31.12	31.77	31.92	30.99	29.81	30.05	30.42	31.75	32.45	32.56	32.02
22	29.57	31.13	31.80	31.88	30.90	29.76	30.06	30.41	31.80	32.46	32.61	32.02
23	29.62	31.11	31.86	31.86	30.79	29.77	30.06	30.41	31.86	32.50	32.61	32.03
24	29.69	31.14	31.82	31.81	30.72	29.77	30.06	30.44	31.90	32.55	32.57	32.03
25	29.78	31.20	31.91	31.82	30.70	29.87	30.07	30.47	31.92	32.53	32.56	32.06
26	29.79	31.26	31.93	31.97	30.63	29.87	30.10	30.49	31.94	32.56	32.60	32.02
27	29.83	31.27	31.89	31.87	30.60	29.78	30.09	30.51	32.00	32.55	32.62	32.11
28	29.86	31.18	31.88	31.83	30.55	29.74	30.08	30.52	32.07	32.59	32.63	32.23
29	29.94	31.31	31.87	31.92	---	29.76	30.11	30.57	32.06	32.60	32.59	32.22
30	30.02	31.33	31.90	31.92	---	29.77	30.12	30.63	32.06	32.61	32.46	32.19
31	30.13	---	31.92	31.85	---	29.75	---	30.62	---	32.60	32.43	---
MEAN	29.18	30.79	31.71	31.89	31.23	29.98	29.97	30.31	31.39	32.38	32.60	32.16

WTR YR 1985 MEAN 31.13 HIGH 28.21 LOW 32.68

351709082434101. Local number, NC-147
LOCATION.--Lat 35°17'09", long 82°43'41", Hydrologic Unit 06010105, near Brevard. Owner: U. S. Geological Survey.
AQUIFER.--Unconfined alluvial sand.
WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in, measured depth 22.9 ft, cased from 0 to 11.6 and 21.6 to 25.0 ft, screen from 11.6 to 21.6 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Land-surface datum is 2,176.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.24 ft above land-surface datum.
PERIOD OF RECORD.--June 1985 to September 1985.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.13 ft below land-surface datum, Aug. 19, 1985; lowest, 16.58 ft below land-surface datum, June 25, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5									15.93	16.08	13.82	13.61
10									16.16	16.25	14.60	13.96
15									16.32	14.26	14.83	14.17
20									16.46	14.73	11.33	14.54
25									16.57	14.85	12.99	14.72
EOM									16.39	---	13.44	15.12

WTR YR 1985 MEAN 14.83 HIGH 10.84 AUG 19 LOW 16.57 JUN 25

GROUND-WATER LEVELS

WAYNE COUNTY

352002077581001. Local number, WC-25.
LOCATION.--Lat 35°20'02", long 77°58'10", Hydrologic Unit 03020202, Seymour Johnson AFB, at Goldsboro. Owner: U.S. Air Force.
AQUIFER.--Upper Cape Fear aquifer of late Cretaceous age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in, depth 87 ft, cased to 31 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Elevation of land-surface datum is 70 ft. Measuring point: Top of casing, 0.50 ft above land-surface datum.
REMARKS.--Water levels affected by nearby pumping.
PERIOD OF RECORD.--August 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.24 ft above land-surface datum, Jan 29, 1978; lowest measured, 22.57 ft below land-surface datum, Nov. 21, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.72	8.34	8.77	8.90	8.13	6.43	8.31	9.44	10.69	10.69	---	10.88
10	7.97	8.60	8.74	8.47	6.48	7.43	8.74	9.64	10.76	---	10.65	11.12
15	7.97	8.48	9.13	8.60	5.59	7.97	9.03	9.46	10.77	11.32	10.92	11.28
20	8.46	8.69	9.13	8.84	4.88	7.69	8.99	9.81	10.77	11.28	10.63	11.50
25	8.52	8.71	9.14	9.00	5.30	7.61	9.63	10.29	---	11.39	10.69	11.16
EOM	8.49	8.69	9.03	8.98	6.02	8.01	9.86	10.64	---	---	10.62	10.89

WTR YR 1985 MEAN 9.16 HIGH 4.65 FEB 19 LOW 11.56 JUL 14

351849078163901. Local number, WC-148.
LOCATION.--Lat 35°18'49", long 78°16'39", Hydrologic Unit 03020201, near Grantham. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined fluvial deposits of the surficial aquifer of Post-Miocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 3 in, depth 10.4 ft, cased to 10.4 ft.
INSTRUMENTATION.--Digital recorder --60-minute punch.
DATUM.--Elevation of land-surface datum is 190 ft. Measuring point: File cut on top of casing, 1.80 ft above land-surface datum.
PERIOD OF RECORD.--February 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.13 ft below land-surface Datum, Sept. 14, 1984; lowest, 8.40 ft below land-surface datum, Sept. 19-20, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.91	3.28	3.65	1.81	---	1.70	2.61	4.22	6.44	7.77	5.69	4.92
10	2.31	3.50	3.33	2.08	---	1.94	2.86	4.53	6.68	7.96	5.46	5.39
15	2.69	3.73	3.40	2.06	---	2.22	3.02	4.84	6.96	8.10	5.20	5.82
20	2.86	3.91	3.50	1.75	---	2.42	2.99	5.24	7.16	7.82	4.98	6.18
25	3.09	4.02	3.66	1.95	---	1.80	3.46	5.53	7.43	7.69	4.76	6.39
EOM	3.19	3.72	3.87	1.46	1.51	2.29	3.89	6.02	7.66	6.33	4.43	6.57

WTR YR 1985 MEAN 4.29 HIGH 1.17 FEB 1 LOW 8.12 JUL 16

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^{2})
	4.047×10^{-1}	square hectometers (hm^{2})
	4.047×10^{-3}	square kilometers (km^{2})
square miles (mi^{2})	2.590×10^{0}	square kilometers (km^{2})
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^{3})
	3.785×10^{-3}	cubic meters (m^{3})
million gallons	3.785×10^{3}	cubic meters (m^{3})
	3.785×10^{-3}	cubic hectometers (hm^{3})
cubic feet (ft^{3})	2.832×10^{1}	cubic decimeters (dm^{3})
	2.832×10^{-2}	cubic meters (m^{3})
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^{3})
	1.233×10^{-3}	cubic hectometers (hm^{3})
	1.233×10^{-6}	cubic kilometers (km^{3})
	Flow	
cubic feet per second (ft^{3}/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^{3}/s)
	2.832×10^{-2}	cubic meters per second (m^{3}/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^{3}/s)
	6.309×10^{-5}	cubic meters per second (m^{3}/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^{3}/s)
	4.381×10^{-2}	cubic meters per second (m^{3}/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons